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

Analysis of changes in police data following one year of activity at MGM Springfield

Christopher W. Bruce

Crime Analysis Consultant to the Massachusetts Gaming Commission

20 February 2020

v. 1.2

Table of contents

<div style="border:1px solid">

Important note

This report was prepared for the Massachusetts Gaming Commission and Springfield-area police agencies by a contracted consultant. Although both the Commission and the chief executives of the agencies were allowed to review, comment, and offer alternate viewpoints, the final conclusions are the consultant's and do not necessarily reflect the views of the Gaming Commission nor the contributing police agencies.

Many statistics are offered in this report that show increases and decreases in certain categories in Springfield and surrounding communities. In all cases, when aberrations have appeared, I have done my best to analyze them and determine their cause. Until analyzed, statistics that indicate notable increases or decreases in activity are simply *indicators* worthy of further analysis, and not proof of any particular "cause" of the changes. **No statistic offered in this report should be taken, by itself, as proof of a casino cause**. Anyone who cites or reports the statistics without a thorough consideration of additional factors is using this report irresponsibly.

</div>

Executive summary

Summary

MGM Springfield opened on 24 August 2018 in the midst of a dense, urban area with a historically higher-than-average, but decreasing, crime rate. The large number of patrons drawn to the casino and their associated offenses and victimizations have made the facility the top location for crimes and calls for service in the region, although the overall effect on the region's numbers is mild. In the first year after MGM opened, the most conclusive evidence of effects on public safety has been in certain calls for service related to traffic and visiting population numbers, such as traffic collisions, traffic complaints, and disabled vehicles. Even these are regionally localized and seem to be affecting the southern communities more than the northern ones. There have also been a couple of micro locations close to MGM—principally Union Station in Springfield, a gas station on the same block as MGM, and commercial areas across the bridges in West Springfield—that have seen increased activity. The region has also seen increases in thefts from vehicles, fraud, and purse snatchings, but any direct MGM association remains uncertain.

About this report

- The primary purposes of this report are to conduct an analysis of the increases and decreases in activity in the communities surrounding MGM Springfield since the casino opened, to identify which changes in activity might be attributable to the casino, and to triage trends for more detailed analysis and response among the participating agencies.

- Data was collected from the records management systems of the Springfield, Agawam, Chicopee, East Longmeadow, Hampden, Holyoke, Longmeadow, Ludlow, Northampton, West Springfield, and Wilbraham Police Departments and the Massachusetts State Police. Crimes, calls for service, and collisions during the period of September 2018–August 2019 were compared to the same months over the previous 5 to 7 years, depending on the data quality of the participating agencies.

- Any significant increases were analyzed in more detail with available quantitative data.

- To determine likelihood of a casino relation, I used a rubric of my own design that analyzes the data for several variables: logical connection to a casino, complementary increases in other communities, complementary increases in similar crimes, evidence of increased participation from individuals outside the local area, spatial proximity to the casino, comparison to control communities, and specific mention of the casino or gambling in the police reports.

- Because many of the crimes in these communities were on downward or upward trends, the report compares the eight post-casino months to a range of "expected" values depending on the strength of the past trend.

Major findings

- The casino itself has been the site of several hundred crimes, including violent crimes, property crimes, and police responses for other types of activity. As such, it has risen to the top of the local area list of high-crime addresses and has about as much activity as a large shopping mall.

- To the extent that the casino has "caused" crime, however, it seems largely confined to the casino itself. Both the immediate block around the casino, the Metro Center of Springfield, and the surrounding residential and business community all have normal-to-low volumes, suggesting that attractors of more crime (i.e., extra people in the area) and suppressors (i.e., extra natural guardianship, extra police presence) are canceling each other out.

- The surrounding communities saw some increases and decreases but very few consistent trends to which MGM Springfield serves as a clear source. Issues most likely influenced by the casino include:
    - An increase in traffic collisions and traffic-related calls for service (disabled vehicles, abandoned vehicles, traffic complaints) on state highways and some local roads, particularly to the south and west of the casino (notably in Agawam and West Springfield).
    - An increase in activity at Union Station in Springfield specifically. (The facility had been closed between 1973 and 2017, but crimes and calls increased even in comparison to the combined values at the previous train station and bus stations.)
    - An increase in minor disorder and suspicious activity just across the two bridges in West Springfield.
    - An increase in late-night activity at the Pride gas station across the street from MGM.
- There were several common trends among the agencies for which no direct MGM nexus could be identified (e.g., an arrested offender known to visit the establishment) but which have a logical connection, a spatial connection, or both:
    - A pattern of thefts from vehicles in residential driveways, overnight, usually involving unlocked cars, stretching south and east from MGM, to include the Forest Park area of Springfield, northern Longmeadow, and northeastern East Longmeadow.
    - An increase in purse snatchings seen in the downtown areas of Holyoke, Chicopee, and Springfield, as well as West Springfield during the fall only.
    - Increased fraud throughout the region, often manifesting in telephone calls trying to convince residence that they owe money to the I.R.S. or that a family member is in danger.
- The surrounding communities had several joint trends for which there is no logical tie to MGM Springfield but are still worth addressing to improve public safety in the region. These include:
    - An increase in domestic violence and domestic disputes in Agawam, Ludlow, and perhaps Longmeadow.
    - Increases in pornography-related offenses in several communities. Judging by the locations of the incidents and the demographics of those involved, these seem to be a trend of "selfies" and "sexting" among local teenagers, and not anything occasioned by the casino.
- There is evidence of increased drunk driving in the region caused by the casino. Agawam and Chicopee both reported higher-than average totals, and MGM showed up seven times among "last drink" locations from adjudicated drunk drivers between July 2019 and January 2020. However, drunk driving arrests for the 11-community region are down slightly from their average.
- Despite hypotheses from before the casino opened, there is so far no sign that the presence of the casino has increased crime or calls for service at hotels, restaurants, bars, and gas stations (excepting the one mentioned above), nor has it increased activity specifically within the radiuses of highway exits to and from the facility.

Background and methodology

Background

This analysis is the latest in an effort by the Massachusetts Gaming Commission (MGC) to assess the social and economic influences of new gaming facilities across the state. Primary work in this area is being done by the Social and Economic Impacts of Gambling in Massachusetts (SEIGMA) study at the University of Massachusetts Amherst School of Public Health & Health Sciences, drawing upon research and experiences in many other states.

Although many studies had attempted to study the effects of gambling on overall rates of serious crimes, aggregated annually, hardly any studies have attempted to analyze more specific and minute changes in public safety activity following the opening of casinos, including variations by hour, month, and season, changes in patterns and hot spots, and changes in non-crime activity such as traffic collisions and calls for service. The MGC was interested in the answers to these questions—in analyzing public safety at a level of detail that would actually help police agencies anticipate and respond to emerging and changing problems.

In 2014, the MGC contracted with a career crime analyst, the author of this report, to extract data from the agencies likely to be affected by the opening of Massachusetts's new casinos, and to design a process for assessing changes in those agencies' activity on a periodic basis. Work began in 2015 with baseline and first-quarter analyses of the Plainville area, where Plainridge Park opened in June. As of this date, four years' worth of reports have been issued covering changes in crime and other public safety issues since Plainridge Park opened.

MGM Springfield opened in late August 2018. This is the third report that investigates that casino's influence on the surrounding community.

Publicly-issued and planned reports on changes in crime and police activity from this project

Issued	Report	Notes
August 2015	Report on baseline activity at Plainville area agencies	Established statistical measures for post-casino comparison
November 2015	Evaluation of change in police data after the first three months of Plainridge Park	Few changes discernible in immediate 3 months.
April 2016	Analysis of changes in police data after the first six months of operation at Plainridge Park Casino	Identified traffic-related calls for service as likely related to PPC. Noted increases in fraud-related crimes.
December 2016	Analysis of changes in police data after the first year of operation at Plainridge Park Casino	Continued to note increases in traffic-related calls; established credit card fraud increases as "likely related."
December 2017	Analysis of changes in police data after the first 2 years of operation at Plainridge Park Casino	Most comprehensive report so far. Included comparative analysis of control areas.
June 2018	Report on baseline activity in Springfield-area agencies	First report in preparation for MGM casino.
March 2019	Three-year analysis of Plainridge Park area.	Found no additional major trends not present in two-year report
March 2019	Four-month analysis of MGM Springfield	Showed patterns of thefts from vehicles, traffic collisions in some communities, other scattered patterns
September 2019	Eight-month analysis of MGM Springfield	Showed increases in traffic collisions and complaints but few crime increases.

Issued	Report	Notes
September 2019	Baseline analysis of Encore Boston Harbor area	First report on this casino
October 2019	Four-year analysis of Plainridge Park	
February 2020	One-year analysis of MGM Springfield	This report
February 2020	Four-month analysis of Encore Boston Harbor	
May 2020	18-month analysis of MGM Springfield	
May 2020	8-month analysis of Encore Boston Harbor	

Methodology

The data used in this report was extracted from the individual records management systems of the Springfield, Agawam, Chicopee, East Longmeadow, Hampden, Holyoke, Longmeadow, Ludlow, Northampton, West Springfield, and Wilbraham Police Departments. I established an ODBC connection to each of these agencies' records management and computer-aided dispatch databases, connected to the databases via Microsoft Access, and used a series of "make table" queries to copy the data into Access data tables. I then copied the Access databases to my own computer, password-protecting them in the process, but leaving the originals on the agencies' networks so they could be updated by designated agency members when necessary. No personal identifying information (PII) was collected about any person (offender or victim), and I complied with various agency requests to exclude particular data elements of concern to them. These requests did not affect the integrity and completeness of the overall dataset.

After extracting the data from each individual system, I combined each table into a series of "master" tables. This required translating each dataset into a common set of codes. The uniformity imposed by the NIBRS reporting system (and the fact that all 11 agencies use the same records management and computer-aided dispatch systems) made the translation fairly easy for crime tables; it was a bit more difficult for computer-aided dispatch (CAD) tables, which have no uniform coding even among agencies using the same system.

These master tables formed the data pool for most of the statistics in this report, except where indicated.

CaseN	ReportDT	Agency	IBR	Street1	LocType	Weapon
17-4793-	12/31/2017 22:37:00	SP	13A	KENSINGTON A	Residence	Knife/Cutting
17-1377-	12/31/2017 22:30:00	SP	13A	LIBERTY ST	Bar	Handgun
17-1540:	12/31/2017 19:08:00	SP	13A	CHESTNUT ST	Other/Unknow	Personal
17-5419-	12/31/2017 18:42:00	SP	120	WALDEN ST	Street	Blunt Object
17-1539!	12/31/2017 15:07:00	SP	13A	WEST ALVORD	Residence	Firearm
17-2072:	12/31/2017 14:44:00	WS	120	ELM ST	Residence	Personal
17-5412-	12/31/2017 13:17:00	HO	13A	NEWTON ST	Residence	None
17-5411-	12/31/2017 12:59:00	HO	13A	ADAMS ST	Street	Firearm
17-2071:	12/31/2017 08:52:00	WS	13A	ELM ST	Other/Unknow	Knife/Cutting
17-2071:	12/31/2017 08:32:00	WS	13A	BALDWIN ST	Other/Unknow	Personal
17-1538!	12/30/2017 22:19:00	SP	120	WALNUT ST	Convenience S	Handgun
17-2067:	12/30/2017 15:00:00	WS	120	ELM ST	Gas Station	Knife/Cutting
17-6478-	12/29/2017 23:55:00	HO	120	SOUTH ST	Street	Knife/Cutting
17-5383-	12/29/2017 20:41:00	SP	13A	HOPE ST	Residence	Knife/Cutting
17-4770-	12/29/2017 19:59:00	SP	13A	WORCESTER ST	Residence	Knife/Cutting

Figure 1: The result of a query using the combined dataset.

Interpreting the statistics in this report

This report compares one year of activity post-MGM to the statistics *expected* for the same period had MGM not opened. All statistics, except where noted, are for the period of 1 September to 31 August. When a year is given, it is the *ending* year for this period.

Throughout these reports, my goal has been to present the data using the simplest statistics possible, ensuring a reader without statistical education can still interpret the results. Understanding the statistics in this report requires first understanding two simple ways of predicting future volumes of crime, calls for service, and collisions. Consider one agency, where crime has remained static over a long period:
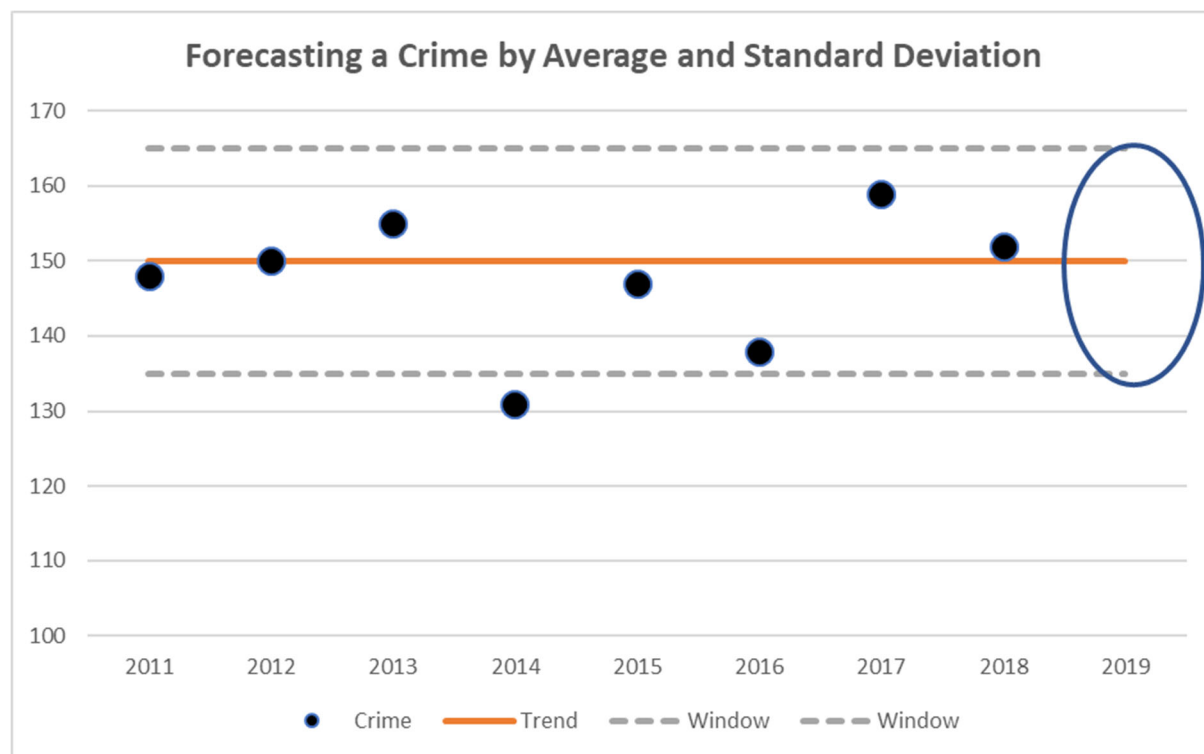
Figure 2: If a crime shows no trend over time, expected values are predicted using its average and standard deviation from the average.

In such cases, crime may vary considerably from year to year around its average, but not in a way that indicates a clear direction over the years. In such cases, we can "forecast" future activity by calculating the average (mean) of the datapoints and then using a number of standard deviations (how much the data typically varies from the average in a given year) to create upper and lower boundaries in which we would expect the data to fall a given percentage of the time. If the data for the following year falls outside this boundary, it's a good sign that something is affecting that category other than just the normal ebb and flow of yearly crime statistics.

This particular method for creating a "prediction window" doesn't work well when the data exhibits a clear trend over the time period in question. Consider the example in Figure 3. Here, forecasting based on the crime's average and standard deviation results in a poor prediction because average and standard deviation tell us only where the crime has been, whereas in this case, the crime is clearly going somewhere. Hence, we need different math to forecast future activity when there's a clear trend.

Figure 3: This method works poorly when the crime shows an increasing or decreasing trend over the period.

Figure 4: Trends require an alternate method of prediction that take into consideration the trendline and the normal variance around the trendline.

To create prediction windows when a past trend is evident (either up or down), I used basic linear regression analysis. Although this method also works for static crimes, it tends to create prediction windows too large to be useful when the number of crimes is poorly correlated to the progression of years.
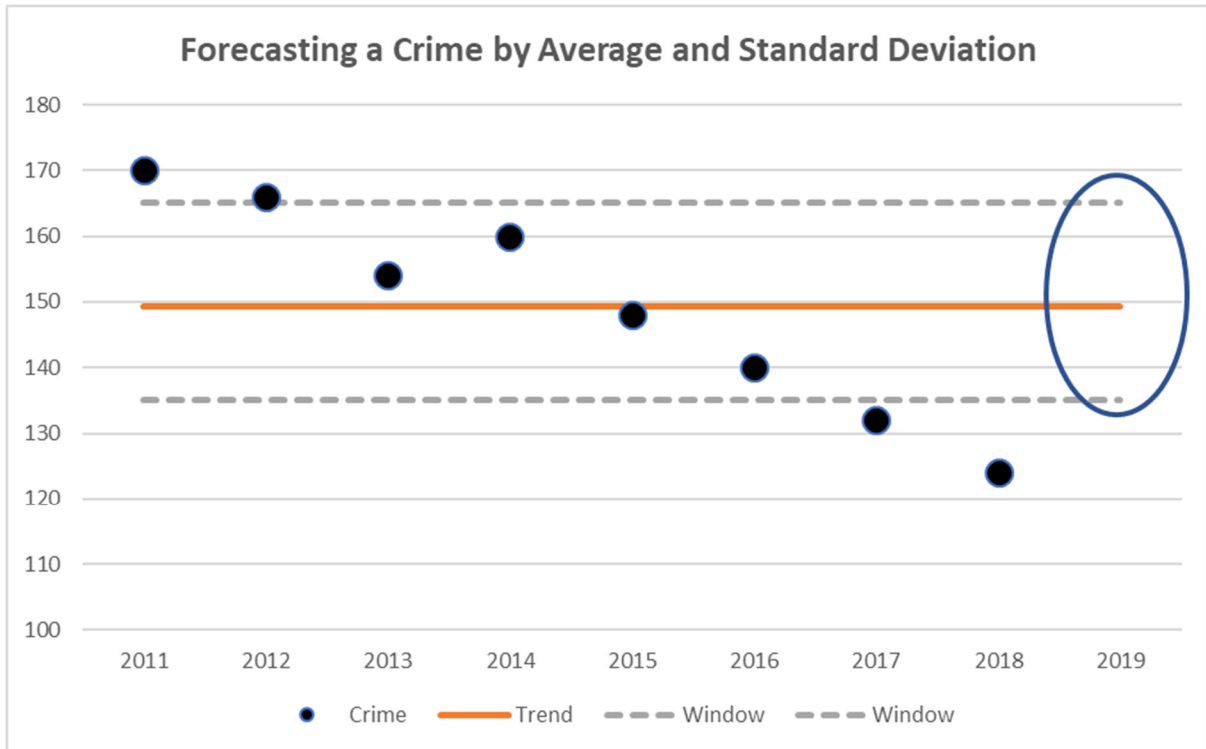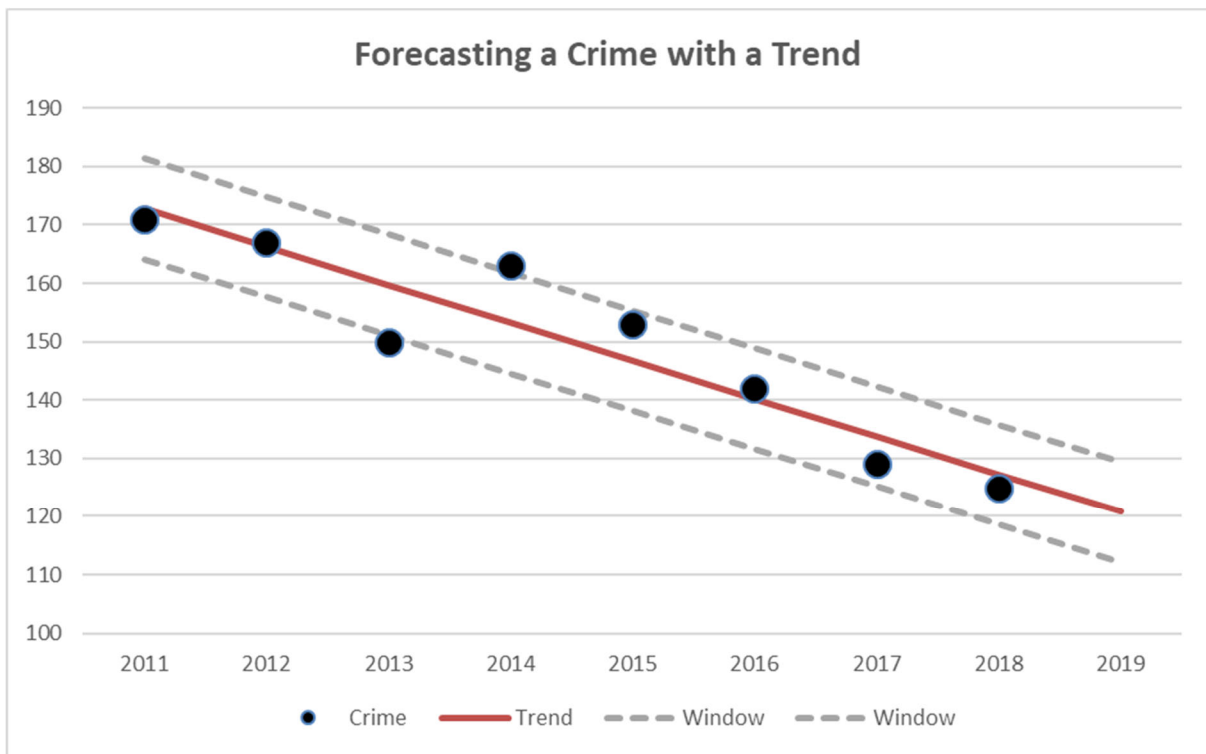
Thus, although most statistics offered in this report contain a "window" of predicted activity for the September 2018–August 2019 time period, the method used to create that window varies depending on whether the category exhibited a previous trend. In both cases, the confidence window is set to 85%, meaning that barring any significant external influence, the 2019 figure had an 85% probability of falling within that window. If it does not fall within that window, it could be just a statistical fluke, but it could also be evidence of some new factor influencing the category, of which MGM is one possibility. Further analysis helps determine how likely it is that MGM is the cause.

The following is a typical table in this report:

Crimes reported to Gotham, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	5	0	C	3–7	5	Expected
Sexual Assault	65	-7	T	18–67	77	High
Kidnapping	18	0	C	16–20	23	High
Robbery	201	-21	T	75–215	163	Expected
Aggravated Assault	317	-15	T	205–334	331	Expected
Simple Assault	1065	-27	T	884–1093	1042	Expected
Threats	606	-8	C	569–643	536	Low
Arson	13	-2	C	2–24	5	Expected
Burglary	551	-112	T	161–367	310	Expected

The columns can be interpreted as follows:

- **Pre-MGM Avg:** The mean of the years (2012–2018 for most agencies, 2014–2018 for Springfield and the total) prior to MGM, for years beginning 1 September and ending 31 August.

- **Slope**: Over the same range of years, the amount by which the crime has increased or decreased each year on the crime's trendline. For instance, robbery had an average of 201, but that was roughly the midpoint in a trendline that shows a steady decline (averaging -21 incidents per year) over the period.

- **Window Type:** Designates the method used for the predictive window. If the crime shows little or no trend (i.e., a small slope compared to the mean), I used the central tendency/standard deviation method designated by a "C." If it showed a strong trend, I used the regression method designated by a "T."

- **Predictive Window:** The window in which we would have expected the 2019 figure to fall, with roughly 85% confidence. The more erratic and unpredictable the past data, the wider this window will be.

- **2019**. The actual number of that crime observed between 1 September 2018 and 31 August 2019.

- **Result:** "High" if the crime is outside its predictive window on the high end; "Low" if it's outside on the low end; "Expected" if it's within the window. Please note that even "High" and "Low" crimes are not proof of a casino influence; other factors could be at work in these communities, or 2019 could be that rare 15% of the time where natural fluctuations cause the crime to fall outside its normal bounds. When the crime is "High," I have done my best to analyze it later in the section.

Determining likelihood of a casino relation

Past studies have generally limited themselves to a purely quantitative determination of whether a casino was a contributory factor in a crime increase. This study—which blends quantitative and qualitative approaches—is not content to use statistics alone to determine the likelihood that any increase in activity was "caused" by the presence of MGM Springfield. Instead, I have created a model to better explain causality when increases are observed. The model demands a more in-depth analysis of the individual cases that make up "increased" activity during the study period, including a qualitative analysis of police narratives.

The model considers seven factors:

1. *Whether the type of activity increasing has a logical relation to a casino*. Causality is more certain when it "makes sense" that such a crime or other activity would increase in the surrounding area in a particular way. Because casinos draw a large number of people to an area, and because cash plays a large role in their operation, there are very few crimes that would not fit this definition, but it's still worth considering. An increase in theft or traffic issues has a logical connection to a facility like a casino; an increase in harassing telephone calls or animal complaints does not.

2. *Whether more offenders and victims are from outside the local area*. If there is a relation between an observed increase in activity and the presence of MGM Springfield, one would expect a corresponding increase in the percentage of victims and offenders from outside the immediate community, as the casino draws visitors from all over New England.

3. *Whether multiple agencies are reporting an increase in the same category*. If only one agency reports a major increase in a particular crime and call for service, the cause is more likely to be related to another factor specific to that jurisdiction than to MGM Springfield. Complementary increases reported by multiple agencies strengthen the likelihood of a casino relation.

4. *Whether related offenses also report increases*. Some crime and call-for-service categories are closely related to each other, so that a factor that influences one is likely to influence the others. If the casino were to cause an increase in traffic collisions, for instance, we might expect a corresponding increase in disabled vehicles, traffic complaints, and other traffic-related calls for service. An increase in a single category without increases in complementary categories is more likely to suggest a fluke specific to that category than a casino relation.

5. *Whether the spatial distribution of offenses is related to the casino location*. For certain crimes and calls for service, if the presence of the casino caused their increase, we would expect to see a spatial distribution of incidents either near the casino or on routes to and from the casino. An increase in "disorderly conduct" in a residential neighborhood 15 miles from MGM Springfield is less likely to be caused by the casino than an increase in such activity at hotels and restaurants within 1 mile of the casino.

6. *Whether the casino is specifically mentioned by victims and offenders involved in cases*. If an increase in activity is causally tied to the casino, we would expect a certain percentage of victims to say that they were in town to visit the casino, or a certain percentage of offenders (if arrested) to admit that their crimes had something to do with the casino. If we cannot find any such evidence across multiple offenses, a casino relation is less likely.

7. *Whether comparison agencies have failed to report a similar increase*. If a certain crime increased only in the MGM Springfield area and not at identified control areas in eastern Massachusetts, this provides stronger evidence of a casino relation. Unfortunately, statewide data collection lags behind our data collection for the MGM Springfield area, and thus it is only possible to assess changes in control areas for 2016 and 2017. Note also that we cannot consider this factor with non-crime calls for service because there is no standardized reporting of this data on a statewide basis.

The table below summarizes the factors in this model and provides hypothetical examples of when they might argue for or against a casino relation. The "hypothetical examples" provided are just that—those particular changes were not actually observed.

Factor	Hypothetical example (likely to be related)[1]	Hypothetical opposite (not likely to be related)
Type of crime is logically tied to activity at casino (LOG)	Increase in robberies in surrounding area	Increase of thefts of property at schools
More offenders and victims are from outside the local area (COM)	Increase in domestic dispute and violence calls at area hotels	Increase in domestic dispute and violence calls at area homes
Same category is increasing in multiple agencies (REG)	3 of 5 communities see increase in thefts from cars	1 community reports increase in burglary while 4 report decreases
Complementary increases in related offenses (REL)	Theft, robbery, and fraud all increase in area	Only identity theft increases in area
Increase is spatially related to location of casino (MAP)	Traffic collisions increase on Route 5 in Agawam, West Springfield	Traffic collisions increase on residential streets in Northampton
Casino is specifically mentioned by offenders/victims (NAR)	Drunk drivers mention they were last drinking at casino	Serial burglar admits to stealing for heroin
No similar increase in comparison communities (OTH)	Burglary is up 10% in the Springfield area but down 5% across the state	Shoplifting increased 15% in the Springfield area but also increased 15% in three control areas

Figure 5: A rubric for determining whether an increase in a crime is likely related to the new casino.

Application of this model helped us reach a conclusion as to whether the likelihood of an increase in crime or calls for service was related to the presence of MGM Springfield. However, the model is not quantitative and the determination of the likelihood of a casino relation is not simply a matter of adding up the number of factors present. For certain incident types, one factor may outweigh the others. For instance, the spatial relation is fairly important in considering the likelihood that an increase in traffic collisions is related to MGM Springfield, but it is less important for property crimes that depend on particular location types, and hardly important at all for family violence.

Limitations and threats to validity

The primary threat to the validity of the statistics in this report is the data structure of the IMC records management system, which makes it difficult to calculate precise crime statistics. All of the participating agencies use this system[2].

Almost every other commercial records management system on the market stores crime incidents and their associated offenses in a master table. All crimes, whether they result in an arrest, go into the same table. If an arrest accompanies the incident, immediately or sometime after, additional data elements specific to the arrest are entered in supplemental arrest tables that link to the master tables. Crime statistics are calculated from the master

---

.

[2] The original system was from a locally-owned company called IMC. This company was bought by Zuercher Technologies, which was bought by TriTech Software Systems, which merged with several other companies to form CentralSquare Technologies. The current name of the RMS seems to be "Records Pro," but locally it is still universally known as "IMC."

tables. The IMC system, in contrast, stores criminal incidents in two separate tables: arrests and non-arrests. (There is technically a third table, storing warrants, but agencies that use this table seem to duplicate those crimes in the incidents table.) Some incidents appear in only one table; an arrest made at the time that an incident is reported, for instance, goes in the arrest table.

This immediately creates a problem when multiple individuals are arrested for the same incident. Two offenders arrested for a single robbery "incident" should count as a single robbery, but there no unique index that ties two arrest records to the same crime. We must rely on the arresting officer filling in a related case number field that does not always get filled in.

Accurate statistics cannot be calculated by simply adding the two tables, as it is possible for a single incident to appear in *both* tables. For instance, an incident may be reported on Monday. Lacking any evidence to make an arrest or issue a warrant, the reporting officer enters data into the incident table. On Tuesday, evidence points to a particular offender, he is arrested, and the officer enters the data into the arrest table.

To account for such situations, the records system contains a field in the arrest table for the original incident number. Both the arrest and incident tables also contain the original call number, which should help deconflict duplications. However, in practice, few agencies use these fields with any fidelity. Moreover, different crime types can appear associated with the same incident in each of the two tables.

Finally, the TriTech/IMC system does not appear to enforce National Incident-Based Reporting System (NIBRS) standards when it comes to the recording of secondary offenses. NIBRS recognizes "lesser included offenses." For instance, it is assumed that every robbery is accompanied by an assault and a theft, and that almost every burglary is accompanied by a theft and a vandalism. Thus, no single crime should report both a burglary and a theft nor a robbery and an assault. Such extraneous offenses co-exist frequently in the IMC system. Indeed, by failing to distinguish between *arrest charges* and *incident offense codes*, the system creates a situation in which multiple extraneous charges often accompany an arrest.

To account for these problems, the statistics in this report adopt the following conventions:

1. Arrests and non-arrests are combined into a single record when the proper cross-indexing values were entered by the reporting officer in the system.

2. Even in absence of the index value entries, arrests and non-arrests are assumed to be part of the same incident if the reporting date/time and address are the same.

3. Multiple arrests are combined into the same "incident" if they happened at the same location and time.

The IMC system also makes a mistake—although this one is replicated among many RMS vendors—of trying to resolve Massachusetts General Law codes directly to NIBRS incident type codes. This allows officers to enter the statute violated by the offender (a code list with which they are familiar because of training and practice) and have the system itself convert it to the appropriate NIBRS code. Although this seems a valuable shortcut, in truth there is a poor relation between statutes and NIBRS codes, and such a system ensures that many crime types—principally in the theft and fraud categories—will be under-reported and a few crime types will be consistently over-reported.

Finally, there are a number of issues with agency coding practice that affect the validity of the baseline statistics and the consistency of data going forward. Common issues include:

- Overreliance on the "All Other" (90Z) IBR code instead of a more specific crime code that applies to the circumstance.
- Overuse of the "Other Theft" (23H) IBR code instead of a more specific theft type—for instance, shoplifting (23C), theft from a vehicle (23F), or theft from a building (23D).

- Rare use of the "Alcohol Involved" flag in the crash reporting module, making the data field essentially useless.

- Overuse of the "Other/Unknown" location type and property type categories.

- Under-use of the "Family Offenses" (90F) code to record restraining order violations and child neglect cases.

- Rampant confusion among the codes for fraud (26A), credit card fraud (26B), impersonation (26C), identity fraud (26G), forgery and counterfeiting (250), and bad checks (90A).

Discussions with agency representatives

Throughout the life of this series of reports, the Massachusetts Gaming Commission has repeatedly convened meetings with the police executives in the Springfield area to review the results of these analyses and receive their comments and feedback. No information about changes in the area is published without giving the local chiefs a chance to comment first. Their feedback has been incorporated into each version of the report. General agreement with these findings has been widespread, and where anyone has disagreed or offered an alternative perspective, it has been noted in this report.

About the author

Christopher W. Bruce is a professor of criminal justice at Husson University in Bangor, Maine. He is also a career crime analyst with previous service at the Cambridge Police Department (1994–2001) and the Danvers Police Department (2001–2010). He was president of the Massachusetts Association of Crime Analysts from 2000 to 2004 and president of the International Association of Crime Analysts from 2007 to 2012. He has served as an instructor in criminal justice and crime analysis topics at Suffolk University (2001–2010), Westfield State University (2009–2010), the University of Massachusetts Lowell (2009–2010), Middlesex Community College (2007–2011), Western Oregon University (2012-2016), and Tiffin University (2006–2018).

Professor Bruce is an internationally-recognized expert in police data systems and police data analysis. He has trained, consulted, and provided technical assistance for various programs of the U.S. Department of Justice, Bureau of Justice Assistance; the U.S. Department of Transportation, National Highway Traffic Safety Administration; the Texas Department of Transportation; the U.S. Department of Justice, International Criminal Investigative Training Assistance Program; and the International Association of Directors of Law Enforcement Standards and Training. He lives in Maine.

Incidents at MGM Springfield

The Massachusetts State Police and the Springfield Police Department respond to incidents occurring at MGM Springfield specifically, including the casino interior, exterior, parking garage, theater, and adjacent streets and walkways. (To further complicate matters, State Police responses are divided between the Gaming Enforcement Unit, which handles the bulk of the activity at the casino, and regular troopers from the local barracks.) Both agencies log incidents in their respective databases, and in many cases, these incidents overlap (e.g., both agencies respond, and both take a report). The State Police Gaming Enforcement Unit has primary jurisdiction inside the casino.

Two statistical sets are offered below: one for the Springfield Police and one for the Gaming Enforcement Unit at MGM Springfield. To some degree, these two tables overlap, but the specific degree of overlap cannot be determined without an incident-level comparison of the events.

Incidents at MGM Springfield reported by the Gaming Enforcement Unit

The following statistics were compiled by the Gaming Enforcement Unit from September 2018 to August 2019. These numbers should be considered the most authoritative of the sources for total figures at MGM Springfield; however, they might exclude some activity in the exterior reported to the Springfield Police.

The arrest statistics (except for the total at the bottom) are not comprehensive, but they are offered for those crimes when a specific relation could be established between the original crime code and the arrest code. For instance, there were 62 arrests for disorderly conduct, but these could not be associated with a specific originating category (likely, they are spread between suspicious persons, intoxicated persons, and "assistance to security), so they are not included in the arrests column. The point of showing the arrest figures when available is to demonstrate the very high clearance rate for crimes committed at MGM Springfield. With its ubiquitous surveillance, a casino is a spectacularly bad place to choose to commit a crime.

Crimes and other incidents, September 2018–August 2019

Crime Type	Sep–Nov	Dec–Feb	Mar–May	Jun–Aug	Total
Assaults	30	9	0	0	**39**
Assistance to security	660	558	340	370	**1928**
Assistance to other agency	61	42	22	30	**155**
Firearms offenses	5	0	0	0	**5**
Fugitive from justice	4	0	0	0	**4**
Gaming violations	38	36	52	27	**153**
Theft, fraud, embezzlement	45	40	22	30	**137**
Counterfeiting	20	30	30	22	**102**
Drug investigations	26	26	17	13	**82**
Robbery	4	0	0	0	**4**
Sexual assault	4	0	1	0	**5**
Intoxicated persons	92	53	38	21	**204**
Suspicious persons	56	33	NR	NR	**89**
Medical	44	67	50	42	**203**
Total ejections	245	169	231	160	**805**
Total arrests	91	44	51	22	**208**
Total criminal summonses	58	40	48	53	**199**

Incidents at MGM Springfield reported to the Springfield Police Department

Crimes, September 2018–August 2019

Crime Type	Sep–Dec 18	Jan–Apr 19	May–Aug 19	Total
Sexual assault	2	3	1	5
Robbery	1	1	1	3
Aggravated assault	4	2	0	6
Simple assault	28	14	14	56
Threats	6	3	6	15
Thefts from persons	1	1	0	2
Thefts from buildings	11	9	5	25
Thefts from vehicles	1	3	1	5
Other theft	2	4	3	9
Auto theft	0	3	3	6
Counterfeiting/Forgery	3	1	1	5
Fraud/con games	4	7	5	16
Credit card fraud	3	1	1	5
Identity theft	1	1	0	2
Employee theft	0	1	0	1
Stolen property	0	1	0	1
Vandalism	6	5	5	16
Drug offenses	4	7	5	16
Weapon violations	0	1	1	2
Disorderly conduct	30	9	12	51
Liquor laws	0	2	1	3
Trespassing	8	14	9	31

Calls for service, September 2018–August 2019

Call Type	Sep–Dec 18	Jan–Apr 19	May–Aug 19	Total
Administrative	2	2	3	7
Alarm	1	0	0	1
All other	48	73	51	122
Animal complaint	2	0	1	3
Assault*	8	6	4	18
Assist other agency	16	11	7	34
Auto theft*	2	4	1	7
Burglary*	1	0	1	2
Crime enforcement	638	631	480	1749
Disabled vehicle	1	0	0	1
Disorderly conduct	27	14	18	59
Domestic dispute	5	3	2	10
Drugs	0	5	3	8
Fire	3	1	2	6
General service	16	7	13	36

Call Type	Sep–Dec 18	Jan–Apr 19	May–Aug 19	Total
Medical	21	13	13	**47**
Missing person	0	1	2	**3**
Other theft	11	17	11	**39**
Overdose	2	0	1	**3**
Psychological	6	4	4	**14**
Robbery*	2	0	1	**3**
Service of papers	1	0	1	**2**
Suspicious activity	15	3	5	**23**
Thefts from vehicles*	1	2	0	**3**
Threats/harassment	0	1	0	**1**
Traffic collision	13	15	12	**40**
Traffic enforcement	4	2	3	**9**
Trespassing*	1	5	4	**10**
Vandalism*	1	2	2	**5**
Vehicle stop	7	6	9	**22**
Warrant service	10	6	2	**18**
Weapons violations	1	1	0	**2**
Well-being check	4	8	5	**17**

*In the case of calls for service relating to crimes, the figures offered are for the call for service as originally dispatched. Sometimes when an officer arrives on scene, he determines that the actual crime committed was different than the crime dispatched. The table above this one, which records actual reported crimes, is a better indicator of criminal activity than the call-for-service table.

How much did MGM Springfield influence Springfield's statistics?

Nothing existed at 1 MGM Way before MGM Springfield, except a construction site, so anything that happens at the casino specifically can be said to have directly contributed to an increase in crime in Springfield, regardless if the casino influenced increases in crime in the area or not. The next sections of this report attempt to estimate the influence of the casino on the *surrounding community*, but if we want to answer the literal influence of the casino itself, the calculation is fairly simple: the percentage of activity at MGM Springfield divided by the total activity in the city. The table below shows the results.

Springfield Activity, September 2018–August 2019

Category	Number at Casino	Total Springfield Number	% New Caused by Casino
Violent crime offenses	86	6,220	+1.4%
Property crime offenses	90	7,328	+1.2%
Total crime offenses	370	24,511	+1.5%
Calls for service	2374	226,148	+1.0%

In this sense, MGM Springfield has contributed very little to Springfield's "bottom line." That said, in the year since it opened, it has become the single location in the 11-community area with the highest number of violent crimes, the second-highest number of calls for service, and the second-highest number of total crimes (after the Holyoke Mall). Its specific rank depends on whose statistics you consult.

Reported crime at top locations, September 2018–August 2019

Agency	Top Offense Location	Violent Crimes	Property Crimes	Total Crimes	Calls for Service
Holyoke	Holyoke Mall	50	464	704	887
Springfield	MGM Springfield	86	90	369	2242
West Springfield	Riverdale Shops	17	245	365	676
Chicopee	Chicopee Marketplace	35	176	339	1805
West Springfield	Century Center	15	178	290	623
Springfield	Springfield Plaza	53	106	228	1615
Agawam	Six Flags New England	40	93	191	149
Northampton	Walmart/Big Y Plaza	4	117	185	573
Springfield	Baystate Medical Center	41	34	153	807
Springfield	Union Station	24	1	134	2318
Holyoke	Holyoke Hospital	29	10	132	349
Holyoke	Holyoke Shopping Ctr	77	77	126	358
Wilbraham	Stony Hills Plaza	0	58	115	1398
Northampton	Meadowbrook Apts.	24	14	106	650
Springfield	Maple Starr	0	0	105	117
Springfield	Mercy Medical Center	32	22	103	668
Northampton	Highview	14	13	87	244
Springfield	Next Step	0	0	83	128
Springfield	State Street CVS	14	36	80	564
West Springfield	Eastern States Expo.	3	34	70	154
Springfield	Indian Motorcycle Bldg	32	9	68	310
Springfield	Eastfield Mall	41	41	65	506
Chicopee	Big Y	0	40	54	323
Springfield	Science & Tech High Sch	28	10	52	121
Springfield	Kennedy Middle School	32	4	51	271
Springfield	Springfield Public Day	29	6	49	192

One-year Comparison: All agencies

This section analyzes changes in crimes and calls for service in the Springfield area between the five years before MGM Springfield and the one year afterwards. For Springfield and the region as a whole, the numbers exclude MGM Springfield specifically, as they are meant to help assess notable changes in the surrounding area.
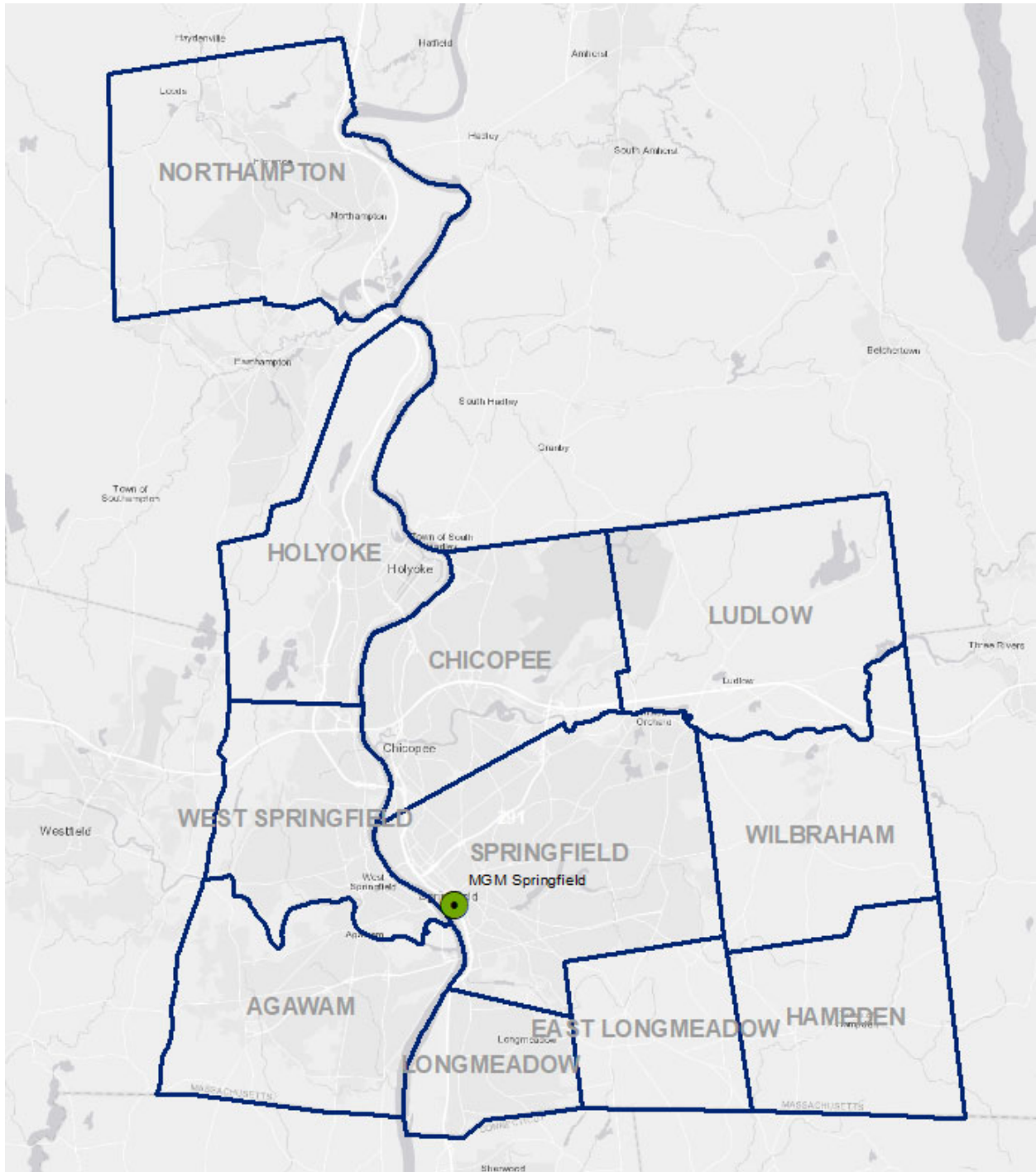
Figure 6: The communities contributing to this analysis.

The goal here is not simply to identify what crimes increased or decreased in comparison to their norms. Crimes fluctuate all the time for any number of reasons. Our goal is:

1. To determine which crimes increased *significantly enough* that some external factor—and not just random fluctuations in data—is likely to be responsible for those increases; and

2. To analyze those significant increases for evidence that MGM Springfield is that "external factor."

3. To identify trends to be investigated more thoroughly in the next report.

On advice from the Springfield Police Department regarding changes in their data quality control, this analysis uses only the years ending 2014–2019 to determine past trends and the predictive window for that agency's crime. Because Springfield's total makes up so much of the region total, the report also uses only those years to calculate the regional trend. For other agencies, the report considers the full 2012–2019 data series.

Summary of all communities' activity

The 11 contributing communities saw expected totals of overall crime, commensurate with what they would have received if MGM had never opened. The most noticeable likely effect of the casino is an increase in collisions and traffic-related calls for service in some communities that feed traffic to Springfield, particularly Agawam and West Springfield. A pattern of thefts from vehicles from residential driveways has plagued south Springfield and northern parts of Longmeadow and East Longmeadow, and there are some potential purse-snatching/theft from person patterns in Springfield, Holyoke, and Chicopee.

Incidents reported to region, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	22	1	C	17–27	25	Expected
Sexual Assault	402	-1	C	357–447	407	Expected
Kidnapping	97	0	C	80–114	112	Expected
Robbery	774	-23	T	555–809	571	Expected
Aggravated Assault	1729	14	C	1635–1823	1726	Expected
Simple Assault	5586	-95	C	5119–6053	5164	Expected
Threats	3037	-74	T	2485–2994	2560	Expected
Arson	77	-8	T	34–75	53	Expected
Burglary	3283	-366	T	1816–2298	1822	Expected
Theft from Persons	70	5	T	57–119	67	Expected
Purse-Snatching	37	-5	T	15–43	48	High
Shoplifting	1552	10	C	1442–1662	1670	High
Theft from Building	1547	-126	T	858–1630	1061	Expected
Theft from Machine	7	3	T	9–24	10	Expected
Theft from Vehicle	1634	-96	T	1158–1663	1391	Expected
Theft of MV Parts	358	49	T	349–670	355	Expected
Other Theft	5510	-763	T	2630–3509	2972	Expected
Auto Theft	1120	-49	T	837–1015	818	Low
Forgery	352	-7	C	309–395	363	Expected
Fraud	692	14	C	624–760	859	High

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Credit Card Fraud	277	41	T	371–511	348	Low
Identity Theft	700	-30	T	453–753	599	Expected
Employee Theft	68	2	C	52–84	44	Low
Extortion	17	3	C	6–33	50	High
Stolen Property	314	-7	T	242–333	247	Expected
Vandalism	4742	-231	T	3354–4345	3614	Expected
Drugs	1676	-51	T	1284–1662	1293	Expected
Statutory Rape	56	4	T	58–90	77	Expected
Pornography	52	7	T	65–93	100	High
Prostitution	59	-11	T	25–65	28	Expected
Weapons	529	29	T	569–724	648	Expected
Bad Checks	87	-7	T	49–87	30	Low
Disorderly	870	-87	T	534–800	639	Expected
Drunk Driving	493	-4	C	448–538	477	Expected
Drunkenness	297	-31	T	158–254	211	Expected
Family Offenses	157	71	T	385–528	505	Expected
Liquor Laws	198	-9	T	143–207	184	Expected
Trespassing	554	-12	C	394–714	755	High
Violent Total	**11647**	**-179**	**T**	**9884–11975**	**10565**	**Expected**
Property Total	**22356**	**-1557**	**T**	**14779–17476**	**16391**	**Expected**
Total	**39031**	**-1195**	**T**	**31635–34882**	**31903**	**Expected**

Purse Snatching

Purse snatching reported high totals in the downtown areas of Springfield, Chicopee, and Holyoke for the year, and was high in West Springfield during the first half-year. Although few commonalities can be identified among the incidents and no agency has been able to identify a specific MGM connection, the area-wide increase is at least possibly related to the casino. It is a cash crime, which has a logical relationship, at least some of them are geographically close to MGM.

Shoplifting

Reports of shoplifting increased in Chicopee, Holyoke, and Wilbraham. They were low in Agawam and within their expected volumes everywhere else. The increases are highly localized in these communities; five stores account for about 80% of it: Home Depot on Boston Road in Wilbraham, Home Depot on Memorial Drive in Chicopee, Victoria's Secret at the Holyoke Mall, T. J. Maxx at Holyoke Crossing, and Skechers in West Springfield (although West Springfield didn't see, on the whole, a significant increase). Chicopee has a more generalized increase than the other communities, with a lot of individual stores reporting 5–7 shopliftings when they used to report 2–3. In discussions, local agencies report a major increase in organized retail theft at these locations, with suspects coming from out of state. They could not identify an MGM connection.

Extortion

The high extortion total was mostly a Springfield matter, stemming from a series of incidents in the fall of 2018. The Crime Analysis Unit reviewed the data on the cases and found a pattern of telephone scams which probably should have been coded as "Fraud/Con Games" rather than extortion.

Pornography
Springfield, East Longmeadow, and Holyoke all reported pornography increases. All evidence points to a trend of local students sharing under-aged selfies and getting recipients in trouble for possessing them.

Trespassing
Chicopee, Holyoke, and Northampton all reported high trespassing totals, all for different reasons that do not seem to have anything to do with MGM. See the individual city analyses.

Selected calls for service reported to region, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	558	84	T	739–1047	976	Expected
Disabled Vehicle	2591	114	T	2517–3575	3001	Expected
Disturbance	24528	443	T	23806–28797	25035	Expected
Domestic Dispute	11271	113	T	11133–12316	10800	Low
General Service	18395	-692	T	11835–20348	18152	Expected
Gunshots	1129	-63	C	792–1466	1099	Expected
Hunting	27	-2	T	14–32	23	Expected
Liquor	446	-12	C	384–508	329	Low
Lost Property	666	2	C	617–715	550	Low
Medical	22665	978	T	22644–30513	25514	Expected
Overdose	2294	657	T	4356–5153	4360	Expected
Psychological	18623	174	C	16907–20339	17611	Expected
Suspicious Activity	16200	685	T	17000–20882	18388	Expected
Traffic Collision	4663	453	T	5089–7859	5271	Expected
Traffic Complaint	434	11	C	347–521	463	Expected
Vagrancy	558	84	T	739–1047	976	Expected

There were no regional increases in the major call-for-service categories, although some of the individual cities

Collisions reported to region, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	7625	336	T	7928–10013	8798	Expected
Parked vehicle	1669	87	T	1807–2227	2109	Expected
Pedestrian	286	1	C	255–317	291	Expected
Bicyclist	146	-2	C	128–164	117	Low
Animal	125	13	T	131–223	185	Expected
Fixed object	894	57	T	1024–1220	1055	Expected
Curb/barrier	461	12	T	444–577	516	Expected
Rollover/Jackknife	49	0	C	43–55	56	High
Other/Unknown	289	-16	T	180–280	265	Expected
Total	**11543**	**488**	**T**	**12158–14835**	**13392**	**Expected**

Although total crashes in the region were expected compared to the norm (with the exception of rollover/jackknife crashes), a map of changes by individual street segments do show patterns that could be attributed to the presence of MGM. In Springfield, crashes were higher on streets directly around the casino, north in the Metro Center, southeast in Forest Park, and east in Old Hill. East Longmeadow, Wilbraham, Agawam, and West Springfield all showed increases on some intersections and state routes that could plausibly feed traffic to MGM.
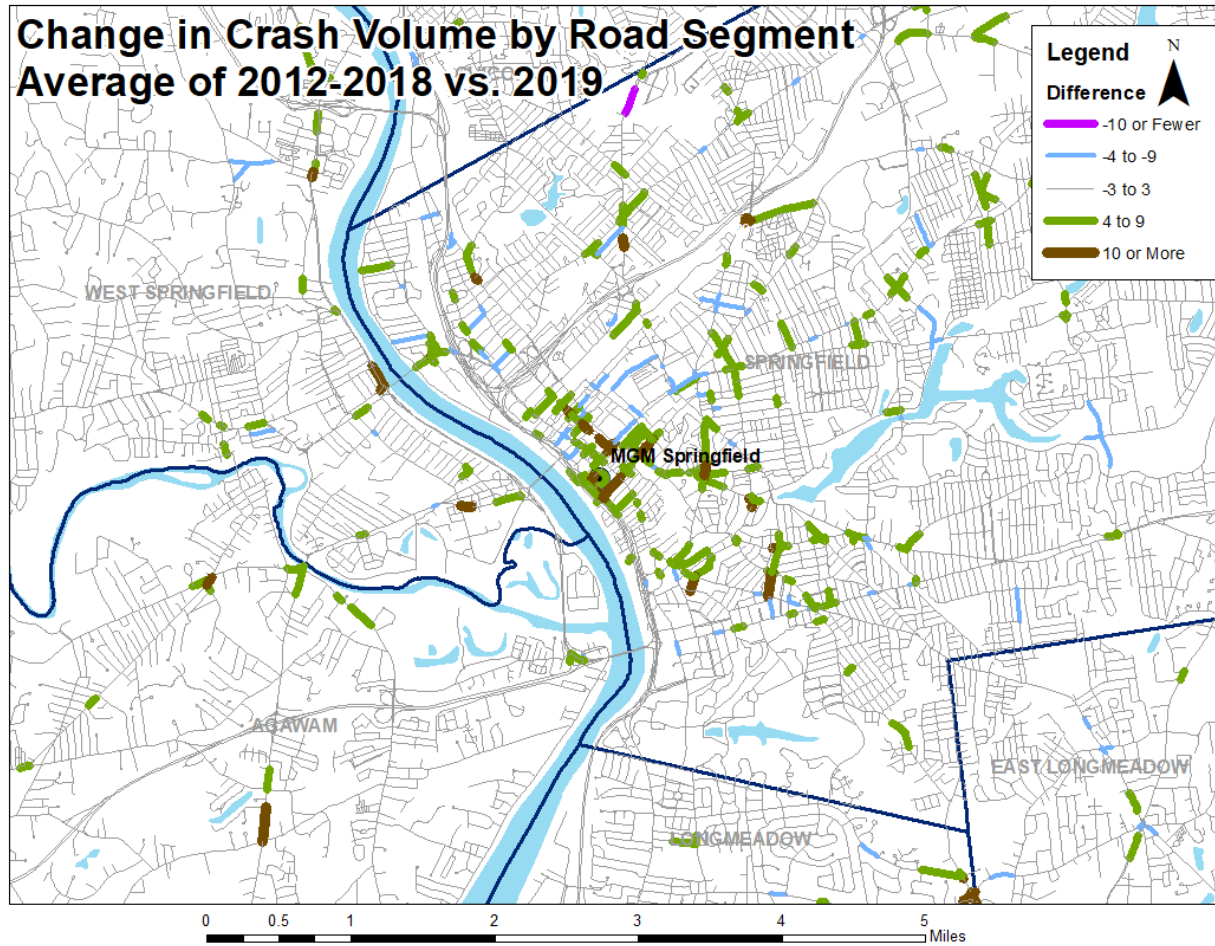
Figure 7: Analysis of changes in crashes by road segment shows a definite MGM influence in Springfield and on feeder roads from other communities.

Summary of crimes in each community, 1 September–31 August

H=High E=Expected L=Low

Category	SP	AG	CH	EL	HA	HO	LO	LU	NH	WS	WI	ALL
Murder	E	E	E	E	E	E	E	E	E	E	E	E
Sexual Assault	E	E	L	E	E	H	E	E	E	E	H	E
Kidnapping	H	E	E	E	E	E	E	E	E	E	E	E
Robbery	E	E	E	H	E	L	E	E	E	L	E	E
Aggravated Assault	E	E	E	E	E	L	E	E	L	E	E	E
Simple Assault	E	H	E	E	E	E	E	H	E	E	E	E
Threats	E	E	L	E	E	L	E	E	E	E	E	E
Arson	E	E	E	E	E	L	E	E	E	E	E	E

Category	SP	AG	CH	EL	HA	HO	LO	LU	NH	WS	WI	ALL
Burglary	E	E	E	L	E	L	E	E	E	E	E	E
Theft from Persons	E	E	E	E	E	H	E	E	L	E	E	E
Purse-Snatching	H	E	H	E	E	H	E	E	E	E	E	H
Shoplifting	E	L	H	E	E	H	E	E	E	E	H	H
Theft from Building	E	L	L	L	E	H	E	L	L	L	L	E
Theft from Machine	L	E	E	E	E	E	E	E	E	E	E	E
Theft from Vehicle	H	E	L	H	E	L	H	E	L	E	E	E
Theft of MV Parts	E	E	L	E	E	E	E	E	E	E	L	E
Other Theft	E	L	H	E	L	L	E	E	E	E	E	E
Auto Theft	E	L	L	E	E	E	H	L	H	E	E	L
Forgery	H	E	E	E	E	E	E	L	E	E	E	E
Fraud/Con Games	H	E	E	E	E	H	E	L	H	H	E	H
Credit Card Fraud	E	L	L	L	E	L	L	L	E	E	E	L
Identity Theft	E	L	E	E	E	E	E	L	L	E	H	E
Employee Theft	E	E	E	E	E	E	E	L	L	L	L	L
Extortion	E	E	E	E	E	E	E	E	E	E	E	H
Stolen Property	E	L	E	E	E	E	L	E	E	E	E	E
Vandalism	E	E	E	E	E	E	L	E	L	E	E	E
Drugs	L	E	E	E	E	E	L	E	E	E	L	E
Statutory Rape	L	L	H	H	E	E	E	L	E	E	E	E
Pornography	H	E	E	H	E	H	E	E	E	E	E	H
Prostitution	E	E	E	E	E	E	E	E	E	E	E	E
Weapons	E	H	E	E	E	H	E	E	E	E	E	E
Bad Checks	L	E	L	E	E	E	E	L	E	L	E	L
Disorderly	E	E	E	E	E	E	E	L	E	E	E	E
Drunk Driving	E	H	H	E	E	E	E	E	L	E	E	E
Drunkenness	E	E	H	E	E	E	E	E	E	E	E	E
Family Offenses	E	E	L	E	E	H	E	E	H	E	E	E
Liquor Laws	E	E	H	L	E	H	E	E	E	E	E	E
Trespassing	E	E	H	L	E	H	E	E	H	E	E	H
Violent Total	E	E	E	E	E	L	E	H	E	E	E	E
Property Total	H	L	E	E	L	L	L	E	E	E	E	E
Total	E	E	E	E	L	L	L	L	E	E	E	E

One-year comparison: Springfield
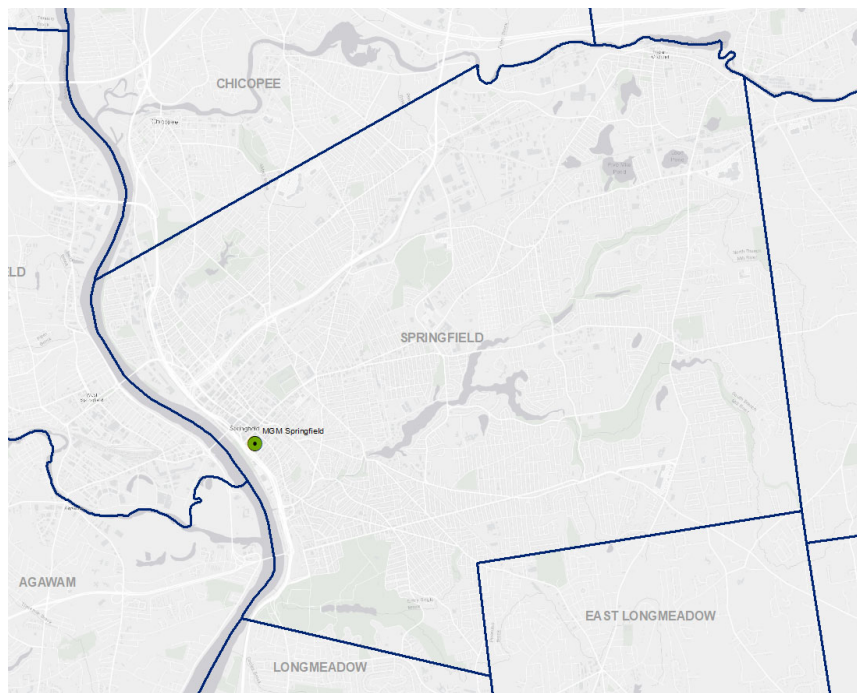
Population (est. 2018): 154,562

Area: 33.1 square miles

Police officers: 448

City center distance from MGM: 2.77 miles

MGM's host agency is the third largest city in Massachusetts and the fourth-largest in New England. Dense, urban, low-income, and historically reporting a higher-than-average rate of crime and violence, Springfield is poised to see numerous changes from the MGM Springfield casino. The first of those—an additional 59 police officers—has already taken place (and is reflected in the total above).

MGM opened on 24 August and has averaged 10,000 to 15,000 visitors per day. It swiftly became Springfield's top location for crimes, calls for service, and arrests, even considering the fact that the State Police take most of the reports. But not even a facility with as much activity as MGM can make much of a dent in a city with so much else going on, and on Figure 7, we see the influence of MGM on the total crime trend for the year is barely perceptible, even when we include crimes at MGM itself.

At the end of the year, kidnapping, purse snatching, thefts from vehicles, forgery, fraud, and pornography were the only crimes that had significantly increased. The purse snatchings, thefts from vehicles, and forgery could plausibly be related to MGM-driven increases, but most only manifested themselves in the summer, and it's tough to say for sure without more data.

Later analysis of specific geographies in Springfield shows evidence of some crime being suppressed by the extra police presence and legitimate traffic in the Metro Center.
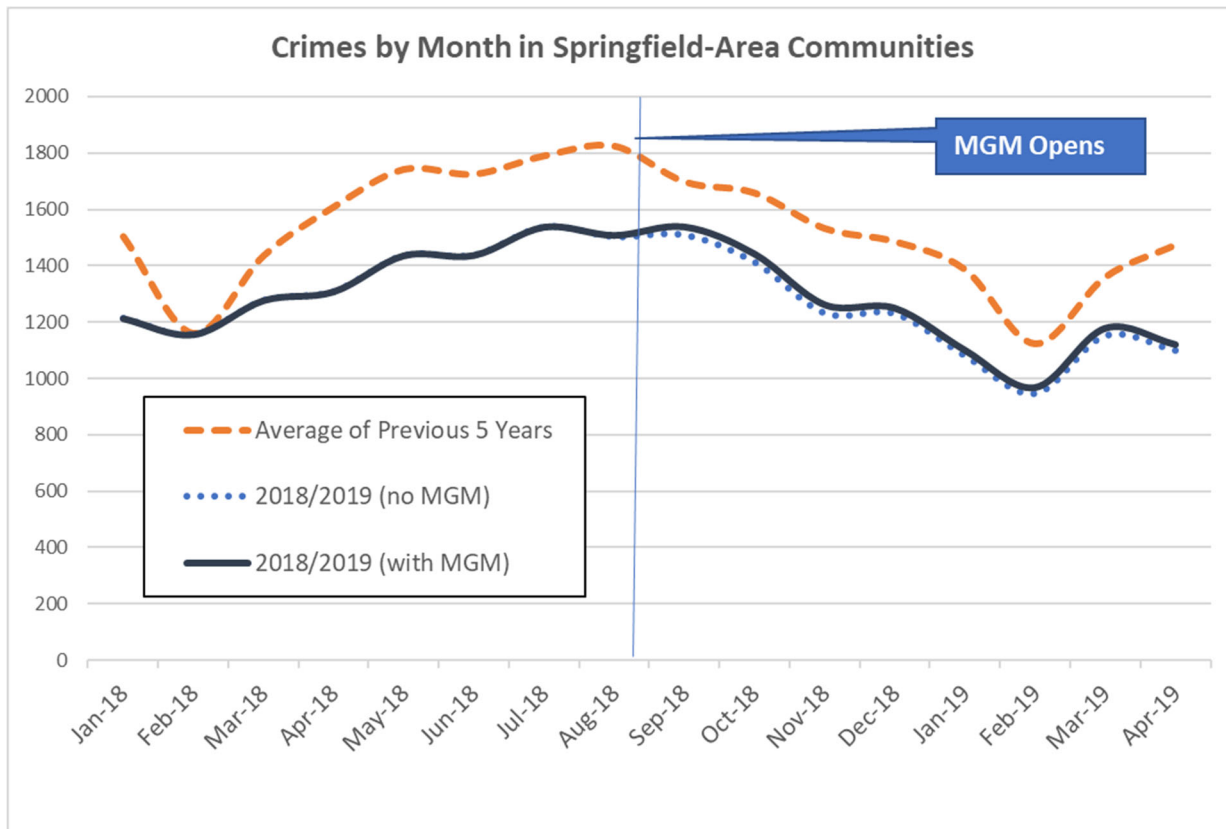
Figure 8: The opening of MGM is barely reflected in overall crime statistics, even in Springfield alone.

Crimes reported to Springfield, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	16	0	C	13–19	18	Expected
Sexual Assault	206	-9	T	137–221	206	Expected
Kidnapping	62	-2	C	49–75	77	High
Robbery	540	-17	T	357–585	402	Expected
Aggravated Assault	970	-24	T	745–1001	913	Expected
Simple Assault	3209	-94	T	2427–3241	2918	Expected
Threats	1966	-85	T	1410–1846	1593	Expected
Arson	48	-6	T	16–53	32	Expected
Burglary	1787	-262	T	810–1017	830	Expected
Theft from Persons	47	5	T	33–81	42	Expected
Purse-Snatching	12	-3	T	3–9	11	High
Shoplifting	269	34	T	301–488	351	Expected
Theft from Building	795	-75	T	316–992	646	Expected
Theft from Machine	6	3	T	9–21	8	Low
Theft from Vehicle	886	-64	T	559–852	914	High
Theft of MV Parts	188	67	T	257–470	314	Expected
Other Theft	2659	-666	T	585–1092	756	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Auto Theft	671	-49	T	406–571	465	Expected
Forgery	149	-2	C	126–172	177	High
Fraud/Con Games	241	1	C	211–271	282	High
Credit Card Fraud	122	41	T	208–331	256	Expected
Identity Theft	395	-50	T	181–342	202	Expected
Employee Theft	30	1	C	18–42	31	Expected
Extortion	10	2	T	4–35	34	Expected
Stolen Property	120	-4	T	83–129	95	Expected
Vandalism	2314	-105	T	1718–2074	1784	Expected
Drugs	636	1	C	502–770	455	Low
Statutory Rape	15	-1	C	8–22	7	Low
Pornography	17	2	T	15–33	37	High
Prostitution	50	-10	T	24–57	28	Expected
Weapons	367	22	T	368–540	428	Expected
Bad Checks	34	-2	C	24–44	8	Low
Disorderly	393	-58	T	212–356	243	Expected
Drunk Driving	59	-5	T	34–59	40	Expected
Drunkenness	6	-1	T	1–9	2	Expected
Family Offenses	116	71	T	137–489	478	Expected
Liquor Laws	49	1	C	39–59	48	Expected
Trespassing	300	39	T	311–573	454	Expected
Violent Total	**6970**	**-232**	**T**	**5528–6558**	**6127**	**Expected**
Property Total	**10749**	**-1131**	**T**	**6086–6934**	**7230**	**High**
Total	**19761**	**-1032**	**T**	**14355–16061**	**15585**	**Expected**

Kidnapping

Kidnapping can involve any number of scenarios in which one person abducts another or confines another. Although the category includes the rare stranger abduction, it more commonly consists of parental abductions or instances in which a domestic violence offender confines or restrains a victim. The latter scenario seems to make up the bulk of the kidnapping incidents in the last 12 months. 2018 showed a 5-year high for this offense, both before and after MGM opened, but 2019 so far has been normal. The Springfield Crime Analysis Unit has investigated each of the 2018 cases and finds no plausible link to MGM.

Purse snatching

An unusually high total of incidents, and five of them are within walking distance of MGM. Several of the incidents seem to involve black male suspects. Whether these incidents are part of a pattern, the proximity to MGM and the appearance of similar patterns in Chicopee and Holyoke suggest a possible MGM relationship.

Thefts from vehicles

Springfield saw an increase in nighttime thefts from cars from residential driveways in the lower part of the city, southeast of MGM. The pattern abated for a while in early 2019, perhaps thanks to extra directed patrols in the area, but it returned starting in May.

Figure 9: Five purse snatchings near MGM Springfield.

Forgery

Forged checks and counterfeit notes were high throughout the year, finally crossing the expected threshold in the final few months of 2019. This seems to be primarily a postal problem: Eleven incidents were reported at the U.S. Post Office in Forest Park, and another nine at the Post Office on State Street. As the later analysis of the Metro Center area shows, the crime was also high in the immediate neighborhood. A review of suspects shows that most known suspects were from the local area, but we do have a smattering of them from eastern Massachusetts, New York, and as far away as California.

Fraud/con games

Springfield saw a major increase in this crime type in the summer of 2019, but with few commonalities in terms of location and time. The Crime Analysis Unit reviewed the cases and did not find any patterns or any explicit MGM relationship. As with many Massachusetts communities, there seems to be an increasing trend of telephone frauds in the area.

Pornography

Springfield joins some of the other communities in a high pornography total. In contrast to those other cities, Springfield's incidents are mostly at local residences rather than schools,

Thefts from Vehicles at Residences
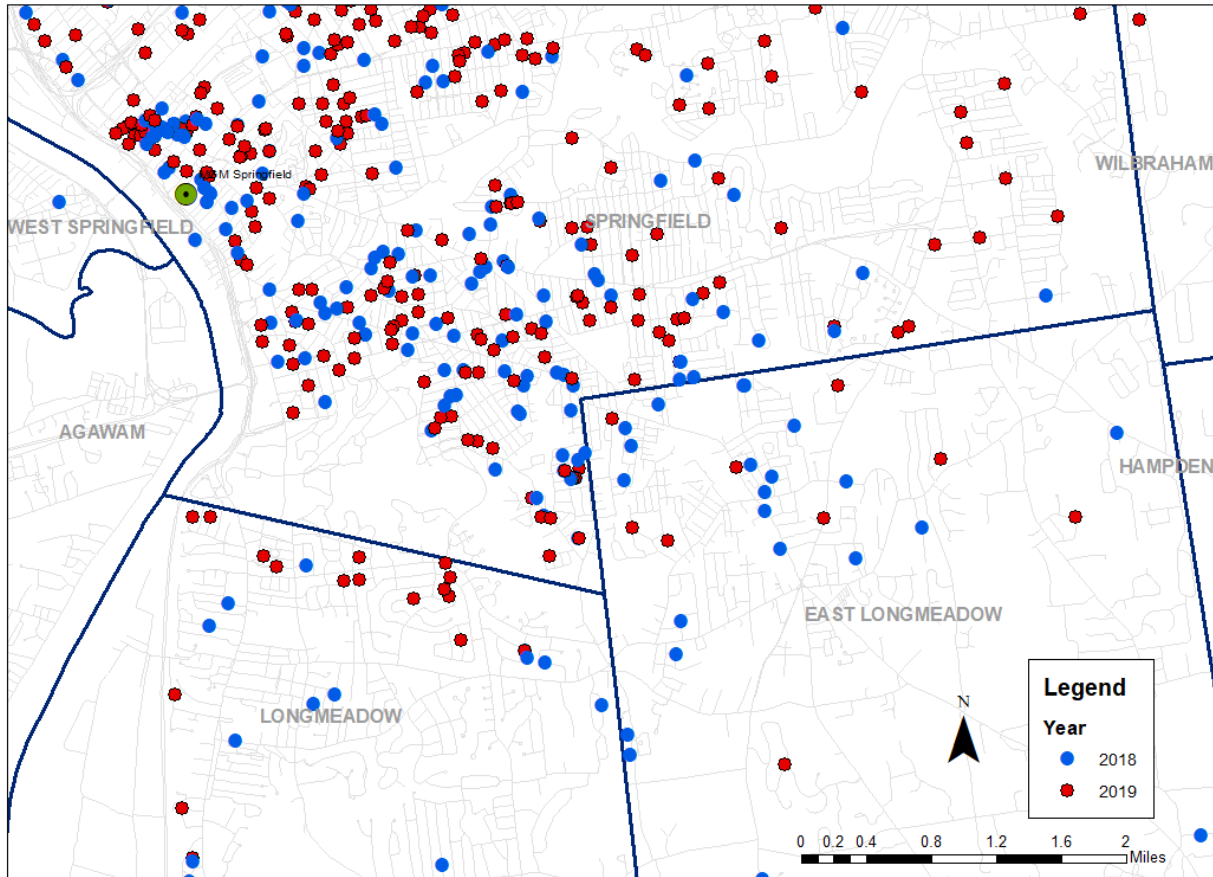
Figure 10: Nighttime thefts from cars in residential areas increased, particularly in the summer of 2019..

Selected calls for service reported to Springfield, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	378	87	T	613–818	736	Expected
Disabled Vehicle	674	39	T	682–977	859	Expected
Disturbance	12207	638	T	12855–16660	14363	Expected
Domestic Dispute	9719	60	C	9422–10016	8986	Low
Gunshots	7529	-968	T	4053–6963	5624	Expected
Medical	974	-54	C	664–1284	938	Expected
Psychological	10279	201	C	8901–11657	11027	Expected
Suspicious Activity	1891	657	T	3606–4294	3697	Expected
Traffic Collision	7596	205	T	7213–9619	7636	Expected

All of Springfield's call-for-service types showed normal or low volume in the year after MGM opened. Increases in disabled vehicles and medical aids during the fall of 2018 and winter of 2019 did not continue into the spring and summer of 2019.

Collisions reported to Springfield, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	3020	135	T	2983–4141	3657	Expected
Parked vehicle	577	45	T	624–885	763	Expected
Pedestrian	155	1	C	135–175	167	Expected
Bicyclist	76	0	C	65–87	66	Expected
Animal	8	1	T	5–19	7	Expected
Fixed object	342	28	T	408–502	436	Expected
Curb/barrier	157	9	T	150–234	185	Expected
Rollover/Jackknife	15	0	C	11–19	8	Low
Other/Unknown	77	-6	T	43–83	42	Low
Total	**4426**	**214**	T	**4593–5968**	**5331**	**Expected**

A facility expected to draw several million visitors per year was naturally expected to have a traffic influence on the surrounding community. In Springfield's case, the local roads seem to have borne the extra burden well. Although total crashes did increase by about 100 over 2018, the total was consistent with the trend that Springfield was on whether the casino was built or not; the city has increased by an average of 199 collisions per year between 2011 and 2018.

Springfield's accident totals clash a bit with Figure 3 (earlier in the report), which shows increases in collisions by street segment and highlights many of those segments directly around MGM. It's possible that MGM did have an influence on the number of accidents in its immediate vicinity while still not appreciably increasing overall accident totals.

One-year comparison: Agawam
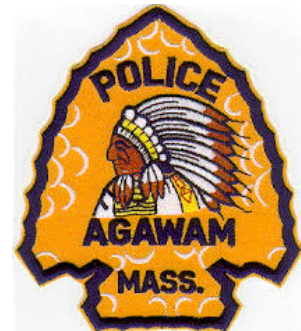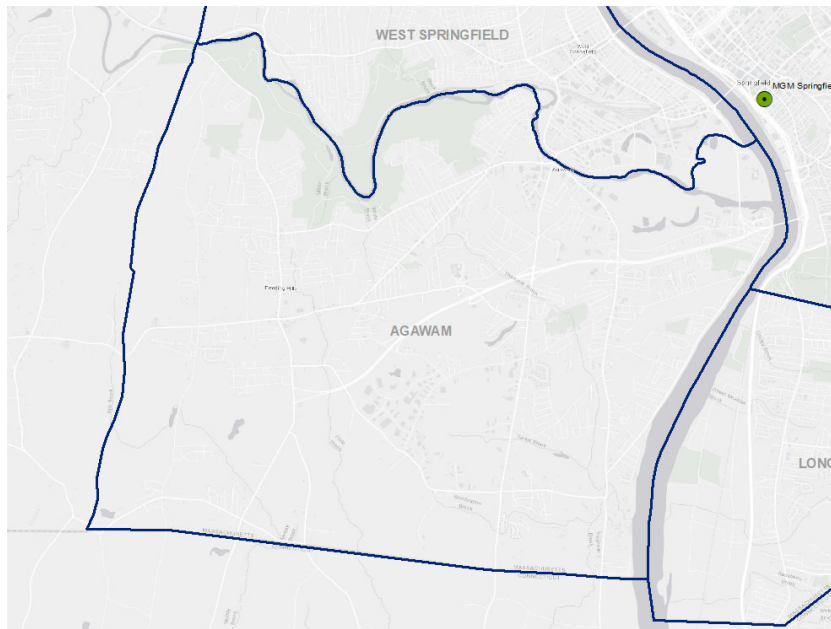
Population (est. 2018): 28,839

Area: 24.2 square miles

Police officers: 50

City center distance from MGM: 7.97 miles

Just across the river from the new casino, Agawam's northeast corner practically touches MGM Springfield. There is some evidence that, like West Springfield, Agawam's increase in traffic collisions in 2018 can be at least partly attributed to the extra traffic brought by MGM. For crime, however, the agency had little that suggested an MGM nexus. The agency is one of several experiencing an increase in domestic violence, which has an uncertain casino connection.

Crimes reported to Agawam, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	0	0	T	0–0	0	Expected
Sexual Assault	14	0	C	9–19	16	Expected
Kidnapping	1	0	C	0–3	1	Expected
Robbery	8	2	T	8–20	12	Expected
Aggravated Assault	48	8	T	65–93	74	Expected
Simple Assault	141	19	T	192–238	248	High
Threats	40	8	T	46–90	65	Expected
Arson	2	0	C	0–4	0	Expected
Burglary	148	18	T	142–280	147	Expected
Theft from Persons	1	0	C	0–3	2	Expected
Purse-Snatching	2	0	C	0–4	2	Expected
Shoplifting	20	5	T	22–50	14	Low
Theft from Building	30	5	T	34–55	32	Low
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	7	-1	C	2–15	10	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft of MV Parts	4	1	C	0–10	4	Expected
Other Theft	219	26	T	262–351	198	Low
Auto Theft	33	0	C	27–39	18	Low
Forgery	18	2	T	13–35	20	Expected
Fraud/Con Games	40	7	T	54–75	66	Expected
Credit Card Fraud	13	2	T	18–24	4	Low
Identity Theft	30	10	T	57–75	53	Low
Employee Theft	3	0	C	0–7	0	Expected
Extortion	1	0	T	0–4	3	Expected
Stolen Property	17	2	T	18–29	13	Low
Vandalism	106	17	T	124–216	173	Expected
Drugs	40	-7	T	21–35	33	Expected
Statutory Rape	7	2	T	11–15	4	Low
Pornography	3	1	T	3–8	7	Expected
Prostitution	1	0	C	0–2	0	Expected
Weapons	7	1	C	4–10	11	High
Bad Checks	5	1	T	4–11	7	Expected
Disorderly	41	-7	T	14–34	33	Expected
Drunk Driving	33	-3	T	17–39	42	High
Drunkenness	7	1	C	0–15	1	Expected
Family Offenses	31	1	C	2–112	7	Expected
Liquor Laws	14	-3	T	4–14	10	Expected
Trespassing	19	-1	C	12–26	18	Expected
Violent Total	**252**	**36**	**T**	**353–439**	**416**	**Expected**
Property Total	**694**	**95**	**T**	**859–1183**	**759**	**Low**
Total	**1155**	**79**	**T**	**1039–2028**	**1348**	**Expected**

Simple Assault

Simple assaults have been on an upward trend in Agawam, starting at 84 in 2012 and gaining about 19 per year to reach highs of nearly 200 in 2017 and 2018. But in 2019, it shot up to 249, about 35 more than expected even given the past trend. Incidents are evenly split between domestic and non-domestic assaults (based on crime code). About a third of the increase is represented by a nursing facility, but the rest are spread throughout the town. Note that domestic disputes (calls for service without violence) were at the high end of their expected range during this period. Agawam is alone in reporting such increases, however, diminishing the likelihood of any MGM connection.

Weapons

A sudden spate of firearm and ammunition seizures between March and July of 2019 show few commonalities.

Drunk driving

Agawam was the only agency to report a significant increase in drunk driving arrests. The increase came entirely between February and May of 2019 between 10:00 PM and 1:00 AM, although not geographically concentrated. As alcohol-related crashes have not increased during the same period, and no other agencies are reporting similar increases, this trend is likely related to police practice.

Selected calls for service reported to Agawam, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Disabled Vehicle	330	27	T	308–555	478	Expected
Disturbance	431	1	C	373–489	399	Expected
Domestic Dispute	312	-19	T	178–336	333	Expected
General Service	1110	98	T	1214–1789	1785	Expected
Hunting	21	-2	T	11–19	10	Low
Lost Property	15	3	T	12–38	40	High
Medical	1637	115	T	1629–2549	1991	Expected
Psychological	17	2	T	14–39	15	Expected
Suspicious Activity	1324	46	C	1103–1545	1415	Expected
Traffic Collision	829	40	T	873–1108	883	Expected
Traffic Complaint	365	10	C	315–415	435	High

Lost property

A particularly high spring and summer of 2019 increased this category overall for the year. There are no duplicate locations, which is about all that can be determined from the fairly limited data associated with this call type.

Traffic complaints

The bulk of the increase can be traced to Springfield Street (+19 from the average). Other streets with increases include Franklin Street (+9), South Westfield Street (+8), and Kensington Street (+8).

Collisions reported to Agawam, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	373	15	T	387–480	469	Expected
Parked vehicle	45	4	T	54–69	101	High
Pedestrian	8	-1	T	4–9	5	Expected
Bicyclist	5	-1	C	2–8	1	Low
Animal	5	0	C	2–8	8	Expected
Fixed object	52	5	T	53–89	85	Expected
Curb/barrier	29	2	T	28–44	45	High
Rollover/Jackknife	4	0	C	1–7	6	Expected
Other/Unknown	14	1	C	9–19	26	High
Total	**535**	**25**	**T**	**565–706**	**746**	**High**

Like nearby West Springfield, Agawam had a higher-than-expected collision total for the year post-MGM, with the brunt of the increase seen on Springfield Street (+46 from average), Main Street (+22), Suffield Street (+19), and North Westfield Street (+9), all of which serve as major arteries through the town.

One-year comparison: Chicopee
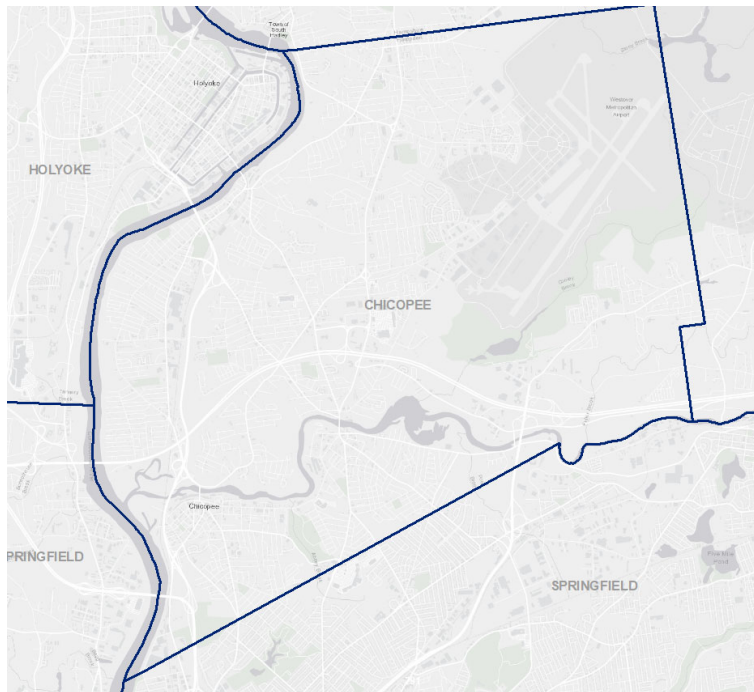
Population (est. 2018): 56,255

Area: 23.9 square miles

Police officers: 134

City center distance from MGM: 5.52 miles

In some ways a northern extension of Springfield, Chicopee has long experienced higher-than-average crimes rates, although the city saw a significant reduction in crimes in the 2000s and has maintained that reduction through the 2010s. Prior to MGM opening, we hypothesized that MGM might see increases at businesses, restaurants, and hotels on travel routes to MGM, but so far such trends have not surfaced. But we have seen increases in purse snatchings, shoplifting, and other theft in general, plus a couple of alcohol-related categories.

Crimes reported to Chicopee, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	1	0	T	0–5	1	Expected
Sexual Assault	63	4	T	53–103	51	Low
Kidnapping	14	2	C	6–23	13	Expected
Robbery	65	-2	C	47–83	67	Expected
Aggravated Assault	163	7	T	143–237	230	Expected
Simple Assault	725	34	T	647–1072	686	Expected
Threats	328	33	T	332–583	324	Low
Arson	3	-1	T	0–3	3	Expected
Burglary	421	-28	T	261–414	317	Expected
Theft from Persons	6	1	C	2–10	6	Expected
Purse-Snatching	7	0	C	3–11	16	High
Shoplifting	167	-3	C	134–200	216	High
Theft from Building	190	-10	T	114–199	90	Low
Theft from Machine	0	0	C	0–0	0	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft from Vehicle	167	18	T	112–367	60	Low
Theft of MV Parts	124	-6	C	98–150	13	Low
Other Theft	331	18	T	324–481	601	High
Auto Theft	126	7	T	117–192	98	Low
Forgery	47	-2	C	33–61	43	Expected
Fraud/Con Games	165	0	C	123–207	149	Expected
Credit Card Fraud	24	-2	T	14–26	9	Low
Identity Theft	96	10	T	86–186	171	Expected
Employee Theft	11	0	C	6–16	6	Expected
Extortion	2	0	C	0–5	5	Expected
Stolen Property	33	-1	C	23–43	24	Expected
Vandalism	487	-4	C	408–566	464	Expected
Drugs	96	-4	C	74–118	96	Expected
Statutory Rape	12	1	C	6–19	30	High
Pornography	9	3	T	13–33	14	Expected
Prostitution	2	0	C	0–5	0	Expected
Weapons	34	3	T	28–61	54	Expected
Bad Checks	11	-1	C	7–15	4	Low
Disorderly	77	-1	C	58–96	94	Expected
Drunk Driving	46	3	T	46–68	84	High
Drunkenness	96	-8	T	52–86	92	High
Family Offenses	1	0	T	1–2	0	Low
Liquor Laws	15	2	T	13–34	47	High
Trespassing	43	-2	T	29–47	51	High
Violent Total	**1358**	**77**	**T**	**1268–2063**	**1372**	**Expected**
Property Total	**2407**	**-3**	**C**	**2134–2680**	**2291**	**Expected**
Total	**4209**	**231**	**T**	**3720–6054**	**4229**	**Expected**

Purse Snatching

Chicopee's increase is centered at Chicopee Marketplace on Memorial Drive. Reports show someone stealing purses from female shoppers at Dollar Tree, Wal-Mart, Marshall's, and Five Below. One suspect has been identified: a 27-year-old homeless woman.

Shoplifting

Chicopee suffered a shoplifting increase at its Marketplace, with Walmart, Big Y, and Home Depot all reporting about twice their average incidents. Various CVS stores in town also contributed higher-than-average totals.

Other theft

Miscellaneous thefts began increasing in Chicopee starting in November 2018—about the same time that other theft categories started to decrease. The Walmart on Memorial Drive accounts for about one-third of the increase. Unfortunately, these facts suggest that the "increase" is simply greater use of the "other theft" code to record crimes that would be better recorded as shopliftings, thefts from persons, thefts from vehicles, and so forth. We would ask the agency to review its use of this code.

Statutory rape

The agency experienced a startling increase in this crime in the beginning of 2019, with 26 incidents recorded between January and August. Confidentiality requirements prohibit too much discussion of this category, but there is no logical relation between the crime and the presence of a casino, particularly when most of the offenders and victims seem to be local teenagers.

Drunk Driving

Chicopee nearly doubled its normal number of drunk driving arrests and summonses in the post-MGM year. The increase was spread throughout the year, but concentrated between 21:00 and 03:00. The incidents are scattered about the west side of town and while many of them could plausibly be on MGM routes, there is no particular concentration in that direction. Given the similar increase in "open container" charges (see "Liquor Laws" below) during the same period, the evidence suggests a period of intensified traffic enforcement by the Chicopee Police rather than more drunk driving *per se*, particularly since no other agency reported a similar increase.

Drunkenness

Chicopee's increase in this category isn't so much an increase as a reversal of a decrease. From 2012 to 2018, incidents of protective custodies (which make up almost all of this category) decreased steadily, only to reverse in 2019. There are few common locations, and most of the increases is at residences. These facts, plus the lack of a similar increase in other communities, suggests the increase is unrelated to MGM.

Liquor Laws

Chicopee was the only agency to report a significant increase in this offense type. All but five of the offenses involved open containers of liquor in stopped vehicles, suggesting an increase in traffic enforcement rather than a real increase in consumption of alcohol.

Trespassing

The increase is tied entirely to two addresses: the Walmart at 591 Memorial Drive and the Shell gas station at 95 West Street. In neither case is there any reason to think there is any MGM involvement.

Selected calls for service reported to Chicopee, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	39	3	C	23–55	100	High
Disabled Vehicle	420	47	T	393–821	550	Expected
Disturbance	3329	66	C	3011–3647	2886	Low
General Service	2242	181	T	2010–3923	2993	Expected
Medical	1717	214	T	1680–3470	3029	Expected
Overdose	87	52	T	117–449	207	Expected
Suspicious Activity	1817	116	T	1659–2905	2022	Expected
Traffic Collision	2310	196	T	2337–3846	2600	Expected
Traffic Complaint	1918	387	T	2196–4739	2136	Low

Abandoned Vehicle

The agency saw an unusual spike in these calls starting in December, but not in a way that is spatially or logically related to MGM Springfield.

Collisions reported to Chicopee, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	1126	126	T	1246–2010	1325	Expected
Parked vehicle	326	28	T	315–564	426	Expected
Pedestrian	36	1	C	29–43	37	Expected
Bicyclist	17	0	C	12–22	17	Expected
Animal	6	2	T	5–19	23	High
Fixed object	123	10	T	133–195	147	Expected
Curb/barrier	74	5	C	48–100	73	Expected
Rollover/Jackknife	10	1	T	7–19	8	Expected
Other/Unknown	44	1	C	34–54	53	Expected
Total	**1763**	**173**	T	**1879–3032**	**2109**	**Expected**

Chicopee's collisions have been increasing steadily since 2012. Although the 2019 figure did not reverse this trend, it was well within the expected window for all categories, and unusually low for miscellaneous crashes. In the street-based analysis shown in Figure 7, Chicopee only had a couple of streets with higher-than average totals and none of them in an obvious "feed" route to MGM. Given the similar lack of an increase in call-for-service statistics, it seems that if Chicopee is experiencing higher traffic volume because of MGM, it is most likely not reflected on local roads.

One-year comparison: East Longmeadow
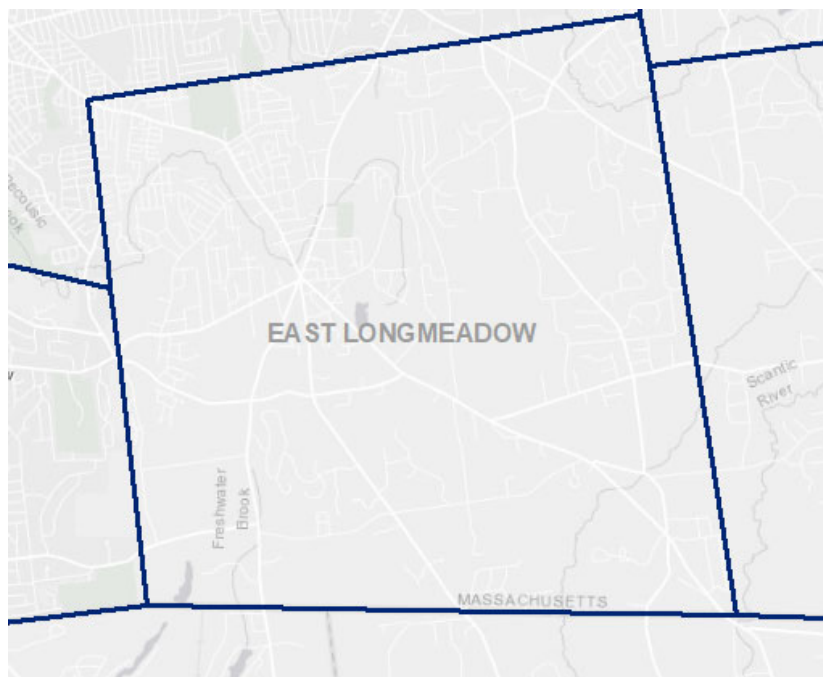
Population (est. 2018): 16,288

Area: 13.0 square miles

Police officers: 27

City center distance from MGM: 5.28 miles

As with most communities in this study, we did not see any major increases on travel routes through the town. However, we did see some thefts spill over the soft northern border that the community shares with Springfield; see below for an analysis of that pattern. An increase in domestic assaults seen in the last four months of 2018 did not continue into 2019. Most other calls for service and traffic collisions came in at expected volumes.

Crimes reported to East Longmeadow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	0	0	C	0–1	1	Expected
Sexual Assault	7	0	C	2–13	4	Expected
Kidnapping	1	0	C	0–2	1	Expected
Robbery	2	0	C	0–4	6	High
Aggravated Assault	17	-1	C	8–27	18	Expected
Simple Assault	61	-6	T	30–61	61	Expected
Threats	53	-13	T	17–31	31	Expected
Arson	1	0	C	0–2	1	Expected
Burglary	52	-4	T	27–58	22	Low
Theft from Persons	2	0	C	0–4	1	Expected
Purse-Snatching	3	0	C	1–5	2	Expected
Shoplifting	53	-2	C	38–68	44	Expected
Theft from Building	27	-1	C	16–38	13	Low
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	38	-5	T	18–39	45	High
Theft of MV Parts	6	-3	T	0–3	1	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Other Theft	105	-2	C	89–121	98	Expected
Auto Theft	12	0	C	8–16	14	Expected
Forgery	7	0	C	4–10	7	Expected
Fraud/Con Games	37	-4	T	18–38	37	Expected
Credit Card Fraud	12	-1	C	8–16	6	Low
Identity Theft	13	-1	C	8–18	17	Expected
Employee Theft	3	0	C	0–6	4	Expected
Extortion	0	0	C	0–2	2	Expected
Stolen Property	9	-1	C	3–15	5	Expected
Vandalism	107	-17	T	50–91	53	Expected
Drugs	39	-8	T	13–25	15	Expected
Statutory Rape	3	0	C	1–5	10	High
Pornography	3	-1	T	1–2	9	High
Prostitution	0	0	C	0–1	0	Expected
Weapons	7	0	C	3–11	8	Expected
Bad Checks	5	-1	C	0–10	0	Expected
Disorderly	19	-3	T	7–14	9	Expected
Drunk Driving	27	0	C	21–33	23	Expected
Drunkenness	6	0	C	2–10	3	Expected
Family Offenses	1	-1	T	0–1	1	Expected
Liquor Laws	14	-1	C	9–19	5	Low
Trespassing	19	-1	C	9–29	5	Low
Violent Total	**142**	**-19**	**T**	**68–127**	**122**	**Expected**
Property Total	**488**	**-42**	**T**	**317–443**	**372**	**Expected**
Total	**773**	**-47**	**T**	**313–764**	**582**	**Expected**

Robbery

The same bank—People's United—was robbed twice in the same week in May 2019, contributing to a slight increase in this category. Two men from the Springfield area were ultimately charged; their histories show previous bank robberies and no gambling nexus. Other incidents include a carjacking at Stop and Shop in February and a July robbery at a bicycle shop.

Thefts from vehicles

In the four months after MGM Springfield opened, East Longmeadow saw an increase in thefts from vehicles from residential driveways, plus miscellaneous residential thefts (the data is unclear, but I suspect sheds, yards, open garages, anything short of a burglary), mostly but not universally at night, targeting primarily wallets and purses with cash and credit cards. Among the incidents were several one-night sprees in which multiple residences were hit on the same evening. The two crimes together amounted to about 46 cases in the last four months of 2018 in East Longmeadow, and the pattern also affected Longmeadow and Springfield.

The pattern went dormant for the January–April period. (Springfield and Longmeadow reported extra patrols in their affected areas) but came back to life from May to August, affecting the same neighborhood in the northwest quadrant of the city. These nighttime incidents primarily focus on wallets, purses, cash, and credit cards. No arrests have been made that I'm aware of. A map of the incidents is found in Springfield's section.

The trend did not continue into 2019, but the lingering effects from 2018 kept East Longmeadow's statistics high for the eight-month period.

Statutory rape
East Longmeadow saw a doubling of this offense type. Offenders and victims seem to be from local communities, lessening the likelihood of any MGM connection.

Pornography
The agency took six reports of child pornography during this period plus three reports of distributing pornographic material to a minor. As with other communities reporting this increase, many of the incidents are at area schools and suggest teenagers engaged in an unfortunate selfie/SnapChat/"sexting" trend rather than anything connected with MGM.

Selected calls for service reported to East Longmeadow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Disabled Vehicle	54	-2	C	33–75	14	Low
Disturbance	47	1	C	27–67	33	Expected
Domestic Dispute	81	32	T	136–221	178	Expected
General Service	1239	-32	C	1016–1462	1414	Expected
Liquor	4	-1	C	1–8	0	Low
Lost Property	35	-5	T	7–32	4	Low
Medical	1751	100	T	2041–2262	1488	Low
Suspicious Activity	1040	3	C	948–1132	810	Low
Traffic Collision	527	-1	C	480–574	485	Expected
Traffic Complaint	4	-2	T	0–6	2	Expected
Vagrancy	7	-3	T	1–6	0	Low

East Longmeadow's call for service types were all low or within expected volumes for the one year post-MGM. An increase in "general service" calls seen during the first 8 months of the period diminished in the final four months to bring the category within its range, if at the high end.

Collisions reported to East Longmeadow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	322	4	C	291–353	314	Expected
Parked vehicle	78	-1	C	67–89	74	Expected
Pedestrian	5	0	C	3–7	7	Expected
Bicyclist	3	0	C	1–5	2	Expected
Animal	25	0	C	17–33	22	Expected
Fixed object	45	1	C	38–52	51	Expected
Curb/barrier	18	-1	C	14–22	19	Expected
Rollover/Jackknife	2	0	C	1–4	7	High
Other/Unknown	28	-7	T	6–21	10	Expected
Total	**527**	**-5**	**C**	**482–572**	**506**	**Expected**

Collisions in East Longmeadow were on the lower end of normal for the study period, with the exception of the "rollover/jackknife" category, showed an unusually high (compared to the norm) total on weekdays, with most of the incidents on days of inclement weather. We'll continue to monitor this category, but the fact that it didn't increase elsewhere suggests that it's more likely a fluke than a new trend.

One-year comparison: Hampden
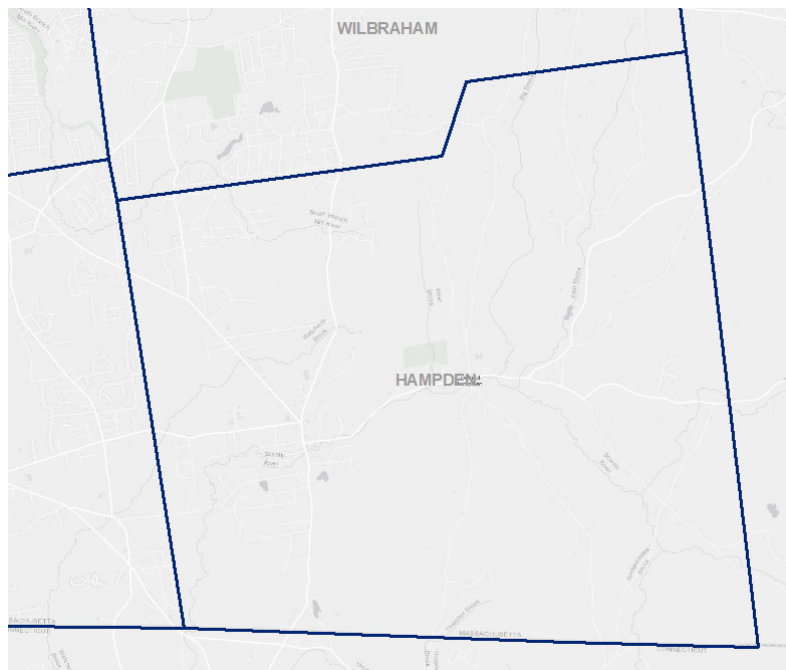
Population (est. 2018): 5,217

Area: 19.7 square miles

Police officers: 11

City center distance from MGM:
9.06 miles

The most geographically isolated of the 11 communities int his study (the town has no highways, major state routes, or PVTA bus routes), it was always a long shot that this low-crime community would see much activity post-MGM. During the year after MGM opened, the agency saw expected volumes of violent crimes and set a 10-year low (at least) for both property crime and total crime. It had no significant increases in any crime category. The only calls for service to see significant increases were hunting-related calls and medical aids, and traffic collisions were normal in all categories.

Crimes reported to Hampden, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	0	0	C	0–0	0	Expected
Sexual Assault	0	0	C	0–1	0	Expected
Kidnapping	0	0	C	0–0	0	Expected
Robbery	0	0	T	0–1	0	Expected
Aggravated Assault	3	0	C	0–6	1	Expected
Simple Assault	9	1	C	5–13	7	Expected
Threats	5	0	C	2–8	2	Expected
Arson	0	0	C	0–0	0	Expected
Burglary	13	-2	T	2–18	6	Expected
Theft from Persons	0	0	C	0–0	0	Expected
Purse-Snatching	0	0	C	0–0	0	Expected
Shoplifting	0	0	C	0–1	0	Expected
Theft from Building	7	-2	T	2–8	4	Expected
Theft from Machine	0	0	C	0–0	0	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft from Vehicle	8	1	T	6–18	7	Expected
Theft of MV Parts	0	0	C	0–0	0	Expected
Other Theft	23	0	C	13–33	7	Low
Auto Theft	5	1	C	0–10	2	Expected
Forgery	1	0	T	0–2	1	Expected
Fraud/Con Games	3	0	C	2–4	4	Expected
Credit Card Fraud	0	0	C	0–1	0	Expected
Identity Theft	3	0	C	0–6	4	Expected
Employee Theft	0	0	C	0–0	0	Expected
Extortion	0	0	C	0–0	0	Expected
Stolen Property	2	0	T	1–2	1	Expected
Vandalism	23	-2	C	14–32	15	Expected
Drugs	3	-1	T	1–4	1	Expected
Statutory Rape	0	0	C	0–0	0	Expected
Pornography	1	0	C	0–2	0	Expected
Prostitution	0	0	C	0–0	0	Expected
Weapons	1	0	C	0–3	2	Expected
Bad Checks	1	0	C	0–3	0	Expected
Disorderly	2	-1	T	0–2	1	Expected
Drunk Driving	12	-1	T	5–16	10	Expected
Drunkenness	3	-1	T	0–3	3	Expected
Family Offenses	0	0	C	0–0	0	Expected
Liquor Laws	7	-1	C	3–11	7	Expected
Trespassing	4	0	C	0–9	1	Expected
Violent Total	**17**	**0**	**C**	**10–24**	**10**	**Expected**
Property Total	**89**	**-4**	**C**	**67–111**	**51**	**Low**
Total	**141**	**-6**	**C**	**120–162**	**86**	**Low**

Hampden reported some of its lowest crime totals in a decade, showing no influence from MGM or indeed any other influences.

Selected calls for service reported to Hampden, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	3	0	C	0–6	1	Expected
Disabled Vehicle	36	-1	C	24–48	30	Expected
Disturbance	41	-5	T	20–34	35	High
Domestic Dispute	25	-2	C	15–35	17	Expected
General Service	897	7	C	811–983	851	Expected
Hunting	3	-1	T	0–4	5	High
Medical	299	2	C	259–339	343	High
Suspicious Activity	204	-12	T	128–222	172	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Traffic Collision	82	2	C	67–97	73	Expected
Traffic Complaint	12	1	C	3–21	10	Expected

Disturbance

Hampden saw an increase in this category starting in May 2019 and continuing through August. Other than a couple of repeat calls to addresses on Somers Road, Allen Street, and Baldwin Drive, I don't see any similarities in these incidents coded as "general disturbances."

Hunting

Hampden joins nearby Wilbraham in an increase in hunting-related complaints, heavily focused in December 2018. There is otherwise no time, day, or geographic concentration, nor any more hints in the CAD data about why such calls were unusually high last year. The increase was only in the last four months of the year; there were no complaints before September or after December.

Medical aids

An increase in medical aid calls can often be the sign of extra people entering a community. However, in this case such an increase is uncorroborated with other call types. The increase seems driven by a handful of residences that had multiple calls in 2019.

Collisions reported to Hampden, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	18	1	T	19–28	17	Low
Parked vehicle	8	0	C	5–11	8	Expected
Pedestrian	0	0	C	0–1	0	Expected
Bicyclist	1	0	C	0–3	3	Expected
Animal	13	2	T	8–35	10	Expected
Fixed object	16	1	C	13–19	14	Expected
Curb/barrier	5	-1	C	2–9	1	Low
Rollover/Jackknife	1	0	C	0–2	1	Expected
Other/Unknown	4	-1	T	2–6	4	Expected
Total	**66**	**3**	**C**	**50–82**	**58**	**Expected**

Hampden had no discernible increase in any collision type during the year post-MGM. Totals for all categories were expected based on past trends, and tended toward the lower end of their ranges.

One-year comparison: Holyoke
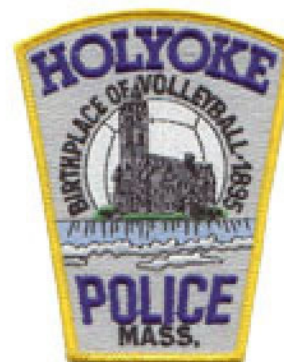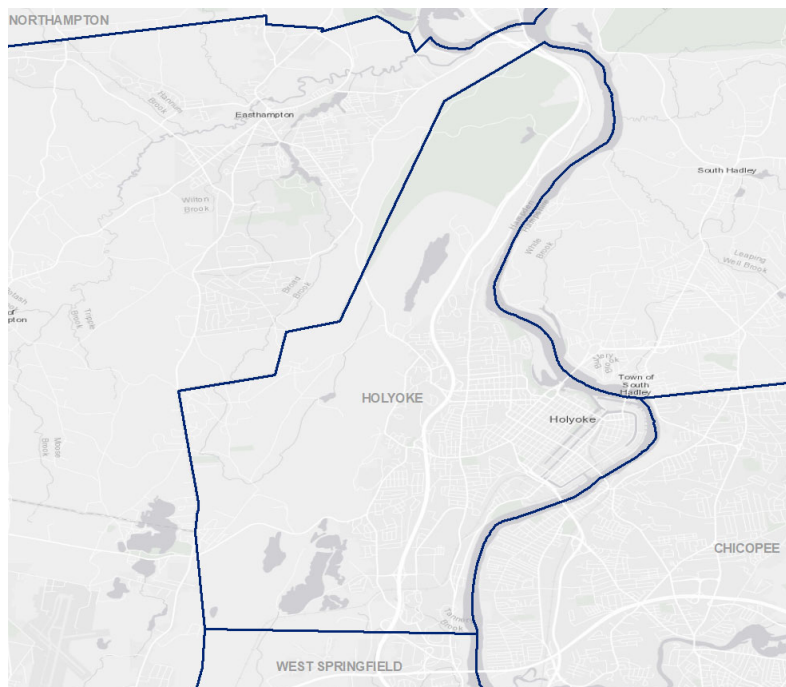
Population (est. 2018): 40,451

Area: 22.8 square miles

Police officers: 119

City center distance from MGM: 7.97 miles

Holyoke is the only participating city that had significant decreases in violent crime, property crime, and total crime, even as some individual categories increased. Those increases are analyzed below, but it's important to keep in mind that Holyoke seems to have embarked on a mission to improve its coding in 2019, and so many of the increases may just be shifts from historically bad codes to correct ones.

Holyoke has a lot of bars, restaurants, hotels, convenience stores, and gas stations that might ultimately see an increase in activity from MGM patrons, but this has not been reflected in the statistics so far. We will continue to monitor.

Crimes reported to Holyoke, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	3	0	C	1–5	4	Expected
Sexual Assault	32	0	C	23–41	42	High
Kidnapping	8	-1	T	4–9	5	Expected
Robbery	96	-1	C	77–115	59	Low
Aggravated Assault	269	12	T	281–353	222	Low
Simple Assault	799	-16	T	626–849	649	Expected
Threats	410	-5	C	369–451	334	Low
Arson	12	0	C	7–17	5	Low
Burglary	390	-32	T	241–319	212	Low
Theft from Persons	0	0	C	0–0	3	High
Purse-Snatching	1	0	C	0–2	7	High
Shoplifting	507	-44	T	298–426	444	High

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft from Building	15	0	C	6–24	26	High
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	230	-20	T	139–223	121	Low
Theft of MV Parts	12	-5	T	2–8	2	Expected
Other Theft	1248	-67	T	830–1134	670	Low
Auto Theft	121	1	C	104–138	113	Expected
Forgery	36	-2	C	20–52	35	Expected
Fraud/Con Games	5	1	T	6–12	65	High
Credit Card Fraud	49	0	C	41–57	40	Low
Identity Theft	0	0	C	0–0	3	Expected
Employee Theft	1	0	C	0–3	0	Expected
Extortion	2	0	C	0–4	2	Expected
Stolen Property	63	0	C	50–76	58	Expected
Vandalism	896	-61	T	548–847	566	Expected
Drugs	567	-12	T	447–594	467	Expected
Statutory Rape	0	0	C	0–0	9	Expected
Pornography	4	1	T	3–9	12	High
Prostitution	2	-1	T	0–3	0	Expected
Weapons	77	3	C	63–91	111	High
Bad Checks	0	0	C	0–2	2	Expected
Disorderly	199	-13	T	130–202	165	Expected
Drunk Driving	41	-1	C	22–60	50	Expected
Drunkenness	0	0	C	0–0	0	Expected
Family Offenses	1	0	C	0–3	7	High
Liquor Laws	4	-1	T	2–3	8	High
Trespassing	76	-44	T	0–39	113	High
Violent Total	**1617**	**-10**	**C**	**1549–1685**	**1315**	**Low**
Property Total	**3589**	**-229**	**T**	**2413–2936**	**2372**	**Low**
Total	**6177**	**-190**	**T**	**4931–5535**	**4631**	**Low**

Sexual assault

This category was slightly higher than normal, particular in June 2019, which reported 11 of the incidents. There seem to be no commonalities by location or other factors supplied, but a thorough analysis of these reports by the agency will be necessary to determine if there are any commonalities.

Thefts from persons and purse snatchings

These offense categories are often confused, and it seemed to make sense to report on them together since Holyoke had a high incidence of both, with almost all reports between May and July of 2019. There is a clear geographic pattern (if not a temporal one—the times are all over the place) in downtown Holyoke during these months.
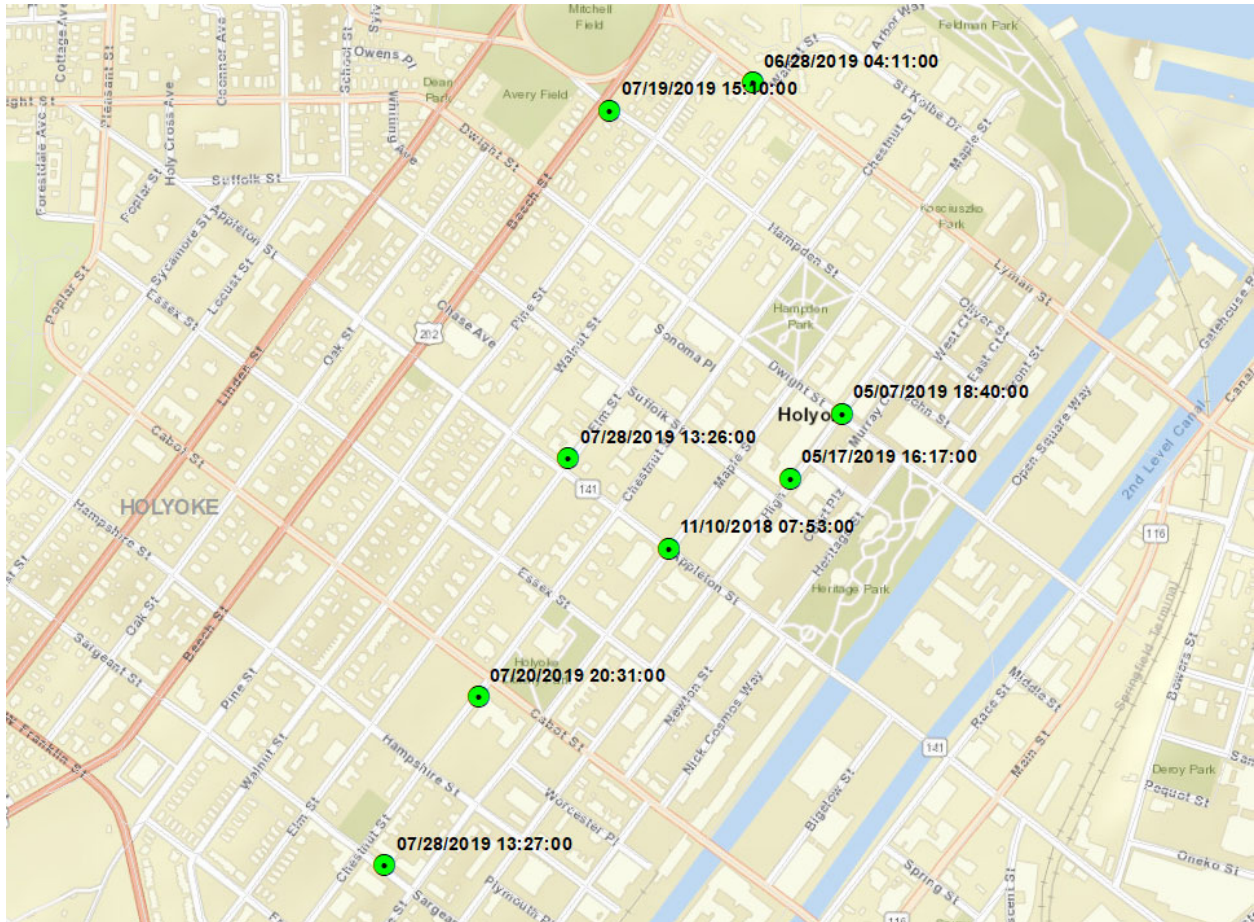
Figure 11: A pattern of thefts from persons in downtown Holyoke between May and July of 2019.

Shoplifting

Big increases at Target, Macy's Victoria's Secret, and JC Penny at the Holyoke Mall, plus Stop & Shop and CVS. Again, this might be a function of improved coding.

Thefts from buildings

There are no commonalities in the businesses affected by this increase, which started in April 2019, about the same time that the agency started improving its coding in other categories. A comparable drop in "all other" thefts suggests a shifting of categories rather than a real trend.

Fraud/con games

There are coding problems with this category. The agency reported single-digit totals in this IBR code (26A) until the end of 2018; then it reported 63 in the one year post-MGM. A review of the charges associated with the codes shows that they are almost all mis-coded credit card fraud (26B) or larceny by check (90A). There are a couple of repeat locations, including the Holyoke Mall and a local package store. It will take a bit longer to untangle the data to see if there are any real increasing trends in these categories.

Pornography

A dozen incidents in the post-MGM year have mostly occurred at local schools, with local teenagers listed as victims and suspects, suggesting that Holyoke's increase is part of a regional trend of sexting and passing around selfies of underaged subjects.

Weapon violations
The increase is made up of firearms offenses of all types; the charge of carrying ammunition without an FID card makes up about half of it. Another third consists of an increase in charges for carrying firearms without a license. Holyoke is some distance from MGM Springfield, and there is no spatial relation between the incidents and the casino. As statistics for this crime are heavily influenced by proactive police work and enforcement, the increase suggests a special operation or focus specific to Holyoke during this period, particularly in September of 2018.

Family offenses
Between February and 2015 and May 2019, the agency reported no crimes in this category, so the sudden increase seems to be a matter of improved coding rather than an actual increase.

Liquor laws
As with Chicopee, the increase seems to exclusively involve charges of open containers of alcohol in vehicles stopped during traffic enforcement.

Trespassing
A massive increase in this crime category began in March 2019, after several years of virtually no use of this code. All evidence points to under-reporting in previous years rather than an actual increase in the number of trespassing incidents. There is a high concentration at several apartment buildings on Elm Street and Essex Street.

Selected calls for service reported to Holyoke, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	99	-4	T	61–113	109	Expected
Disabled Vehicle	312	2	C	266–358	303	Expected
Disturbance	3550	-81	T	3069–3383	2991	Low
Domestic Dispute	400	-5	C	335–465	292	Low
General Service	1431	-13	C	1306–1556	1300	Low
Gunshots	129	-9	T	62–135	141	High
Hunting	1	0	C	0–2	0	Expected
Liquor	106	1	C	89–123	75	Low
Lost Property	99	-6	T	53–95	54	Expected
Medical	1738	104	T	1641–2666	1560	Low
Overdose	61	28	T	69–256	223	Expected
Psychological	168	67	T	171–704	576	Expected
Suspicious Activity	1303	-29	C	1102–1504	944	Low
Traffic Collision	2021	40	T	2034–2331	2103	Expected
Traffic Complaint	208	-13	T	113–244	161	Expected
Vagrancy	401	7	C	312–490	443	Expected

Gunshots
Gunshots reverted to totals seen earlier in the decade after extremely low years in 2017 and 2018. Incidents are heavily concentrated after dark, particularly in the early morning hours on weekends. Over 95% of incidents are east of Route 91, and over 70% are in downtown or South Holyoke. Fortunately, the increase in gunshot calls does not seem to correspond with an increase in people actually shot, as aggravated assault statistics show.
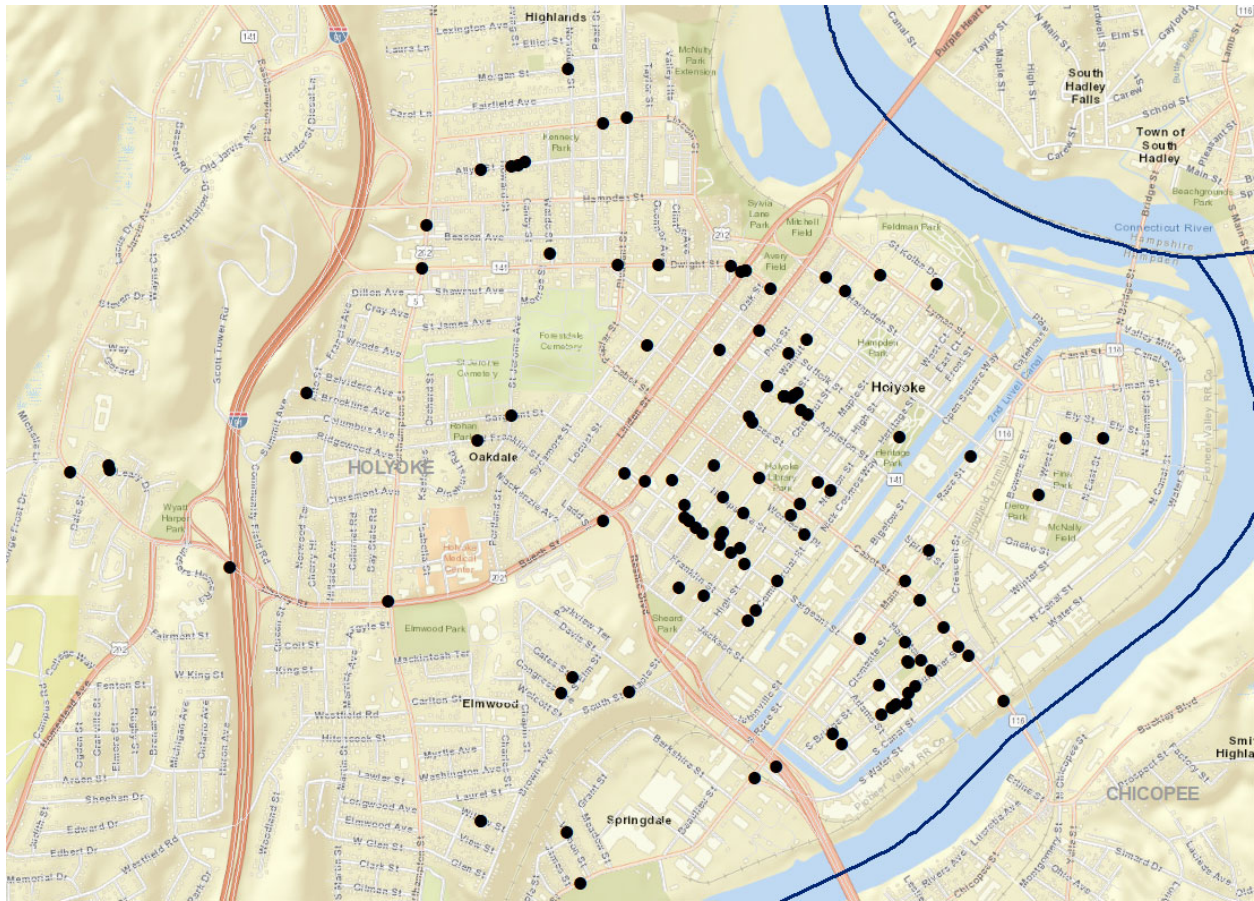
Figure 12: The gunshot area of concentration in Holyoke, September 2018 to August 2019.

Collisions reported to Holyoke, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	1112	32	T	1138–1344	1207	Expected
Parked vehicle	342	10	T	346–421	377	Expected
Pedestrian	34	1	C	23–45	27	Expected
Bicyclist	14	-1	T	8–16	8	Expected
Animal	7	1	T	5–11	3	Low
Fixed object	76	4	T	75–112	76	Expected
Curb/barrier	49	-2	C	39–59	62	High
Rollover/Jackknife	4	0	C	1–8	8	Expected
Other/Unknown	38	-1	C	24–52	36	Expected
Total	**1676**	**46**	**T**	**1714–2008**	**1804**	**Expected**

Only collisions against curbs and barriers were higher than their expected value for Holyoke. There were several days of inclement weather that had two or more such collisions, but otherwise no patterns can be seen in this increase.

One-year comparison: Longmeadow
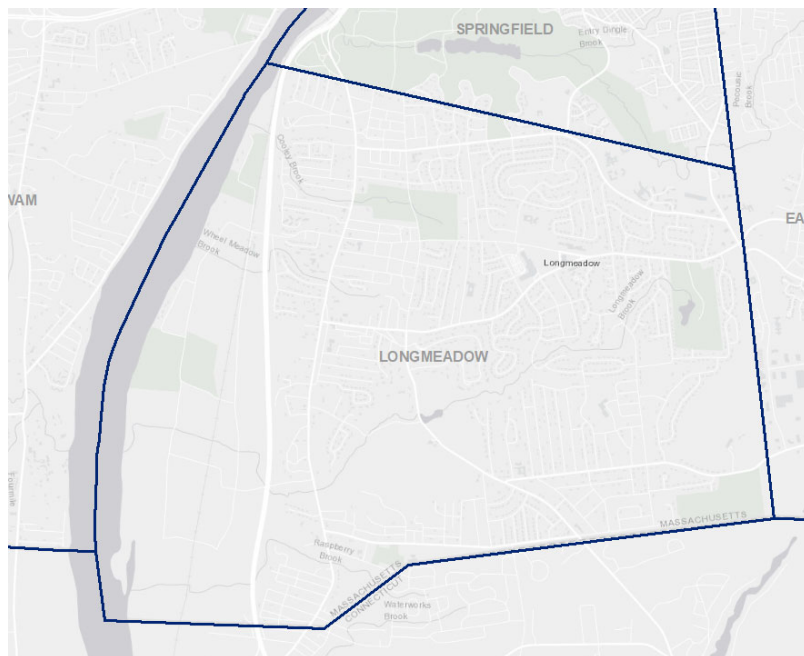
Population (est. 2018): 15,848

Area: 9.7 square miles

Police officers: 27

City center distance from MGM: 3.67 miles

Longmeadow is physically close to Springfield and MGM, and the northern part of the town has often seen a spillover of crime from Springfield's summer neighborhoods. In the year post-MGM, we saw a pattern of increased thefts from vehicles and residences within several northern Longmeadow neighborhoods, suppressed for a while by DDACTS deployments but returning in the summer of 2019. Traffic collisions had also been high in the last four months of 2018 but not in 2019, bringing the total just barely into the "expected" range. Traffic related complaints, on the other hand, remained high.

Crimes reported to Longmeadow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	0	0	C	0–0	0	Expected
Sexual Assault	3	1	T	2–10	5	Expected
Kidnapping	0	0	C	0–1	0	Expected
Robbery	3	-1	T	0–3	0	Expected
Aggravated Assault	7	0	C	2–12	8	Expected
Simple Assault	15	-1	T	9–19	15	Expected
Threats	16	-2	T	8–19	17	Expected
Arson	0	0	T	0–1	0	Expected
Burglary	32	2	C	21–43	32	Expected
Theft from Persons	1	0	C	0–2	0	Expected
Purse-Snatching	1	0	C	0–2	0	Expected
Shoplifting	10	0	C	6–14	8	Expected
Theft from Building	36	2	C	21–51	23	Expected
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	35	-2	C	27–42	43	High

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft of MV Parts	0	0	C	0–1	1	Expected
Other Theft	58	-4	T	31–67	51	Expected
Auto Theft	6	1	C	2–11	12	High
Forgery	6	-1	T	3–6	3	Expected
Fraud/Con Games	26	1	C	16–36	26	Expected
Credit Card Fraud	7	0	C	3–11	2	Low
Identity Theft	25	1	C	17–33	31	Expected
Employee Theft	1	0	C	0–2	0	Expected
Extortion	0	0	C	0–0	1	Expected
Stolen Property	5	0	C	3–7	2	Low
Vandalism	58	-5	T	34–63	33	Low
Drugs	7	0	C	5–9	4	Low
Statutory Rape	2	0	T	1–4	1	Expected
Pornography	1	0	C	0–2	1	Expected
Prostitution	0	0	C	0–0	0	Expected
Weapons	2	0	C	0–4	2	Expected
Bad Checks	3	-1	T	0–4	0	Expected
Disorderly	3	0	C	0–6	1	Expected
Drunk Driving	21	-1	C	11–32	17	Expected
Drunkenness	2	-1	T	0–3	2	Expected
Family Offenses	0	0	T	0–1	0	Expected
Liquor Laws	11	-2	T	2–12	3	Expected
Trespassing	4	0	C	2–6	4	Expected
Violent Total	**44**	**-3**	**T**	**24–50**	**45**	**Expected**
Property Total	**307**	**-6**	**C**	**273–341**	**267**	**Low**
Total	**406**	**6**	**C**	**383–429**	**347**	**Low**

Thefts from vehicles

Longmeadow shared a pattern of thefts from vehicles at nighttime in residential driveways with East Longmeadow and Springfield. The crime was high for the last few months of 2018, nearly disappeared for a while in the first few months of 2019, and then came roaring back for the May–August period of 2019. The pattern involves wallets, purses, and other items of small value taken from unlocked cars while the residents are sleeping. Ludlow seems to have identified more suspects in the cases than the other two agencies, including the arrest of a 32-year-old man from Worcester and the identification of a 26-year-old man from Florida as a possible suspect.

Auto theft

Longmeadow's auto theft increase does not seem to be related to the residential theft-from-vehicle pattern on the north end of town. The incidents are scattered more liberally throughout town and mostly at commercial locations. It would be useful to check recovery locations and conditions for the spate of incidents in fall 2018 and summer 2019.

Selected calls for service reported to Longmeadow, 1 September–31 August

| Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Disabled Vehicle	0	0	C	0–1	0	Expected
Disturbance	117	-6	T	72–118	93	Expected
Domestic Dispute	120	-5	C	94–146	105	Expected
General Service	67	1	C	55–79	52	Low
Medical	877	13	T	836–1023	874	Expected
Suspicious Activity	1040	27	T	998–1299	1207	Expected
Traffic Collision	530	-12	C	473–587	407	Low
Traffic Complaint	382	-6	C	350–414	408	Expected

Longmeadow's traffic complaints had been running higher-than average during the eight months post-MGM, but they dipped just into "expected" territory for the last four months of the one-year period. All other categories were expected or low.

Collisions reported to Longmeadow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	243	-6	T	186–256	247	Expected
Parked vehicle	71	-2	T	54–73	85	High
Pedestrian	3	0	C	1–5	4	Expected
Bicyclist	4	0	C	2–6	1	Low
Animal	16	1	C	8–25	22	Expected
Fixed object	26	1	C	23–29	30	High
Curb/barrier	9	0	C	6–12	14	High
Rollover/Jackknife	0	0	T	0–0	1	High
Other/Unknown	8	0	C	6–10	10	Expected
Total	**380**	**-6**	**C**	**350–410**	**414**	**High**

Longmeadow had a modest increase in crashes involving vehicles in traffic and parked vehicles. The brunt of the increase is concentrated in the northeast corner of the city, at the intersections of Dwight Road, Converse Street, and Williams Street. Although this area could logically be connected with more local traffic going to MGM, a lack of similar increases at other locations along the same routes puts the ultimate conclusion in doubt.

One-year comparison: Ludlow
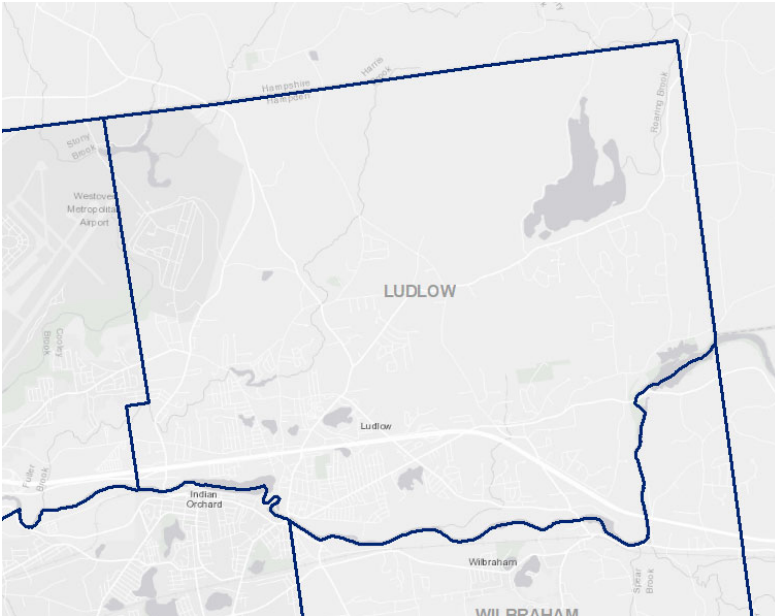
Population (est. 2018): 21,529

Area: 28.2 square miles

Police officers: 40

City center distance from MGM: 9.55 miles

A largely residential community, Ludlow showed no increases in crime along the travel routes to MGM that we hypothesized might see greater activity. Nor did it see any changes in traffic collisions. It did, however, see a near-immediate increase in domestic violence (simple assaults) and domestic disputes, a trend that also affected several other communities in this study. It is too soon to say whether this trend is related to MGM Springfield: answering that question will have to involve a more thorough analysis of the full reports.

Crimes reported to Ludlow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	0	0	T	0–3	0	Expected
Sexual Assault	6	0	C	2–10	4	Expected
Kidnapping	1	0	C	0–2	2	Expected
Robbery	7	-2	T	2–8	3	Expected
Aggravated Assault	27	5	T	33–53	47	Expected
Simple Assault	65	4	C	41–89	111	High
Threats	40	0	C	30–50	39	Expected
Arson	1	0	C	0–2	1	Expected
Burglary	72	-7	T	40–73	42	Expected
Theft from Persons	1	0	C	0–2	2	Expected
Purse-Snatching	2	0	C	0–4	0	Expected
Shoplifting	27	3	C	13–44	30	Expected
Theft from Building	48	-5	T	25–58	16	Low
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	39	-2	C	19–59	32	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft of MV Parts	0	0	T	0–3	2	Expected
Other Theft	132	-12	T	70–111	99	Expected
Auto Theft	19	2	T	18–36	14	Low
Forgery	16	1	T	17–25	13	Low
Fraud/Con Games	31	5	T	39–58	32	Low
Credit Card Fraud	12	1	C	4–20	2	Low
Identity Theft	28	3	T	29–46	22	Low
Employee Theft	3	0	C	1–5	0	Low
Extortion	0	0	C	0–1	0	Expected
Stolen Property	8	-1	C	4–12	5	Expected
Vandalism	125	-5	T	79–136	114	Expected
Drugs	38	3	T	31–66	32	Expected
Statutory Rape	3	1	C	1–6	0	Low
Pornography	2	0	C	0–5	2	Expected
Prostitution	0	0	C	0–0	0	Expected
Weapons	7	1	T	5–14	9	Expected
Bad Checks	7	-1	T	2–8	0	Low
Disorderly	21	1	C	15–27	11	Low
Drunk Driving	44	3	T	45–67	57	Expected
Drunkenness	11	-1	T	5–11	6	Expected
Family Offenses	0	0	C	0–1	0	Expected
Liquor Laws	15	0	C	11–19	14	Expected
Trespassing	10	-1	C	5–16	10	Expected
Violent Total	**146**	**7**	**C**	**111–181**	**206**	**High**
Property Total	**563**	**-17**	**T**	**400–588**	**426**	**Expected**
Total	**866**	**10**	**C**	**787–945**	**773**	**Low**

Simple assault

Ludlow saw a spike in domestic simple assaults (assaults without dangerous weapons and without serious injury) in the final four months of 2018 and then again from May to August of 2019. The events are spread out over the town and show no particular geographic or temporal concentrations, but the charge language suggests that most of the increase is among domestic assaults.

Selected calls for service reported to Ludlow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	6	0	C	3–9	18	High
Disabled Vehicle	161	5	C	137–185	175	Expected
Disturbance	956	-83	T	556–810	747	Expected
Domestic Dispute	156	-3	C	135–177	199	High
General Service	867	44	T	963–1123	1047	Expected
Lost Property	4	1	T	3–8	5	Expected
Medical	1684	63	T	1842–2028	2033	High

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Psychological	7	0	C	3–11	3	Expected
Suspicious Activity	618	40	T	630–931	617	Low
Traffic Collision	553	17	T	530–709	586	Expected
Traffic Complaint	31	17	T	54–125	176	High
Vagrancy	2	0	C	0–4	0	Expected

Abandoned vehicles

The total isn't particularly high compared to other communities, but the 18 "abandoned vehicle" incidents reported by Ludlow in the twelve months post-MGM are high for the community. Most incidents occurred between November and December, but other than a pair of them at 12 Center Street 12 days apart in December, there's no geographic concentration. Nothing else can be determined from available data. A lack of similar incidents in other communities makes an MGM connection unlikely, particularly where the increase did not continue into 2019.

Domestic disputes

Ludlow's increase in domestic dispute calls for service during this period mirrors its increase in domestic-related simple assaults. As with the assaults, this is a trend that did not begin until after September, although it's hard to see why such an immediate increase would be tied to the casino.

Medical aids

A senior housing location called Keystone Commons contributed nearly 100 more medical aid calls in 2019 than the location's average. An apartment on State Street and the Ludlow Police Department itself were both well above average.

Traffic complaints

Complaints of "erratic operation" increased in Ludlow during this period, primarily on Center Street, East Street, Miller Street, and West Street on weekday evenings. However, the agency did not start using this code until 2016, making average and predictive volumes difficult to calculate.

Collisions reported to Ludlow, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	334	24	T	355–503	363	Expected
Parked vehicle	84	4	T	82–117	97	Expected
Pedestrian	7	0	C	4–10	5	Expected
Bicyclist	4	0	C	2–6	7	High
Animal	8	1	T	6–18	13	Expected
Fixed object	63	5	T	71–93	69	Low
Curb/barrier	28	1	C	21–35	31	Expected
Rollover/Jackknife	5	1	T	5–8	9	High
Other/Unknown	27	-1	C	24–30	33	High
Total	**559**	**35**	T	**603–793**	**627**	**Expected**

Ludlow's traffic collisions increased steadily from 2010 to 2018, so it was nice to see that 2019 reversed rather than continue the trend. Although a few categories were higher than normal, no patterns could be seen within them. Overall, the city enjoyed a low-normal number of crashes this period.

One-year comparison: Northampton
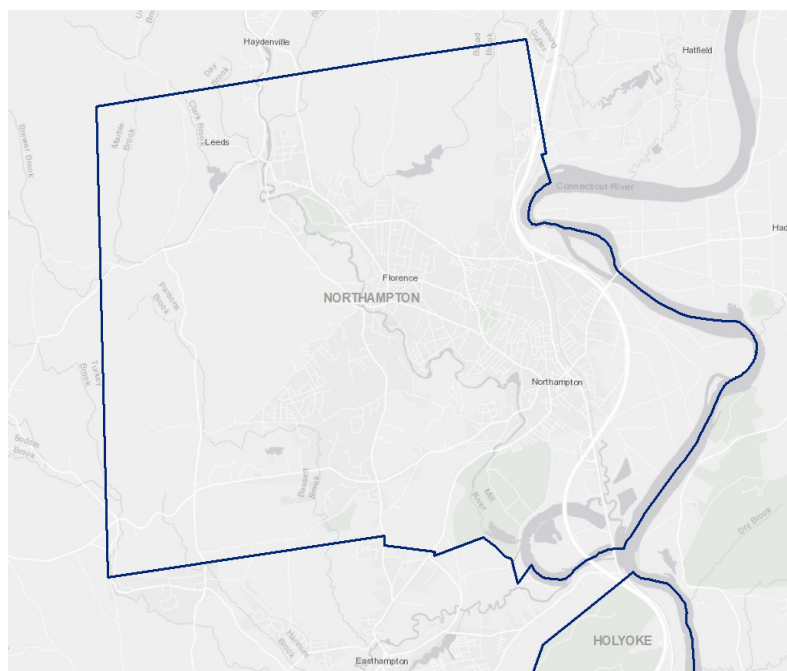
Population (est. 2018): 28,458

Area: 35.8 square miles

Police officers: 63

City center distance from MGM: 16.70 miles

As the farthest community from MGM in this study, if Northampton was likely to have an increase in crimes or calls because of MGM, it would most likely be reflected in its few hotels, services near its highway exits, and perhaps a general increase in the population visiting its arts community. So far, it does not appear that these trends have occurred. Total crime was low for the agency this period, though there were increases in, auto theft, fraud, family offenses, and trespassing. A pattern of bad checks and forged checks seen in the final months of 2018 did not continue into 2019.

Crimes reported to Northampton, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	0	0	C	0–1	1	Expected
Sexual Assault	37	0	C	28–46	36	Expected
Kidnapping	4	0	C	1–8	7	Expected
Robbery	17	0	C	6–28	7	Expected
Aggravated Assault	93	4	T	89–127	88	Low
Simple Assault	296	-15	T	207–274	233	Expected
Threats	74	-7	T	40–71	51	Expected
Arson	5	0	C	1–9	7	Expected
Burglary	120	-13	T	64–110	72	Expected
Theft from Persons	4	0	T	2–4	1	Low
Purse-Snatching	2	0	C	0–4	2	Expected
Shoplifting	150	5	C	109–191	141	Expected
Theft from Building	232	-30	T	130–162	120	Low

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft from Machine	1	0	C	0–2	2	Expected
Theft from Vehicle	73	-6	C	45–101	41	Low
Theft of MV Parts	22	-5	T	8–20	16	Expected
Other Theft	139	-12	T	79–124	83	Expected
Auto Theft	21	-2	T	10–22	24	High
Forgery	29	-2	T	19–32	25	Expected
Fraud/Con Games	53	1	C	43–63	68	High
Credit Card Fraud	16	0	C	9–23	9	Expected
Identity Theft	49	-7	T	25–36	19	Low
Employee Theft	4	0	C	1–9	0	Low
Extortion	0	0	T	0–1	1	Expected
Stolen Property	16	-1	C	10–22	10	Expected
Vandalism	228	-23	T	138–196	130	Low
Drugs	100	-9	T	54–111	55	Expected
Statutory Rape	4	1	T	5–9	7	Expected
Pornography	6	1	C	2–10	8	Expected
Prostitution	0	0	C	0–1	0	Expected
Weapons	12	0	C	6–18	7	Expected
Bad Checks	7	0	C	4–10	7	Expected
Disorderly	69	-5	T	42–76	45	Expected
Drunk Driving	128	2	C	87–169	85	Low
Drunkenness	156	-20	T	71–146	91	Expected
Family Offenses	1	0	C	0–2	7	High
Liquor Laws	41	-5	T	23–40	25	Expected
Trespassing	46	-4	T	24–55	59	High
Violent Total	**522**	**-18**	**T**	**397–503**	**423**	**Expected**
Property Total	**1164**	**-96**	**T**	**762–931**	**771**	**Expected**
Total	**2258**	**-109**	**T**	**1584–1927**	**1590**	**Expected**

Auto theft

Northampton was hit with a modest increase in auto theft during this period, centered east of downtown along Route 5. A lack of corroborative increases in other communities (the crime was significantly low for the region) suggests that the trend is unrelated to MGM, but the agency seems to have a pattern with some causal factor between January and April of 2019.

Fraud/Con Games

A fairly significant increase in fraud incidents from March to August seem to be mostly mis-coded credit card frauds, but that simply shifts the increase to a different category. The Wal-Mart on North King Street reported 10 incidents (up from a usual 4-5 per year), and there was another concentration along Main Street businesses. A detailed review of narratives will be necessary to identify any specific patterns within this increase.

Family offenses

As with Holyoke, the increase here seems to be one of improved coding rather than an actual change. All of the "2019" incidents occurred after March, and there were a couple of repeat residences.

Trespassing

A high number in a somewhat erratic category, Northampton's trespassing increase in the last 12 months is localized in the downtown area, primarily on Main Street. It would have no connection to MGM unless it can be shown that MGM has caused a general increase in visitors to the town.

Selected calls for service reported to Northampton, 1 September–31 August

| Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	21	-2	T	12–24	5	Low
Disabled Vehicle	302	-5	C	262–342	303	Expected
Disturbance	1748	-34	T	1421–1805	1483	Expected
General Service	864	18	T	832–1036	913	Expected
Liquor	332	-11	C	278–386	253	Low
Lost Property	463	8	C	422–504	400	Low
Medical	1648	99	T	1781–2309	1809	Expected
Overdose	23	10	T	52–68	46	Low
Psychological	167	-79	T	0–126	11	Expected
Suspicious Activity	2067	-174	T	1195–2180	1425	Expected
Traffic Collision	1294	19	T	1264–1477	1347	Expected
Traffic Complaint	923	-7	T	846–942	865	Expected
Vagrancy	24	7	T	29–56	20	Low

Increases in disabled vehicles and general service calls seen in late 2018 did not continue into 2019, resulting in no unusually "high" incident types for the overall one-year period.

Collisions reported to Northampton, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	394	-2	C	369–419	371	Expected
Parked vehicle	54	-3	C	37–71	47	Expected
Pedestrian	15	-1	C	9–21	11	Expected
Bicyclist	14	-1	T	7–16	6	Low
Animal	13	1	C	7–19	30	High
Fixed object	48	2	C	33–63	31	Low
Curb/barrier	26	0	C	15–37	16	Expected
Rollover/Jackknife	4	-1	T	0–4	3	Expected
Other/Unknown	14	1	T	12–20	11	Low
Total	**580**	**-6**	**C**	**540–620**	**526**	**Low**

The only cogent category to see an increase in traffic collisions in Northampton was animal-related crashes, which showed no spatial or temporal concentration. Overall crashes were low in the city for the time period.

One-year comparison: West Springfield
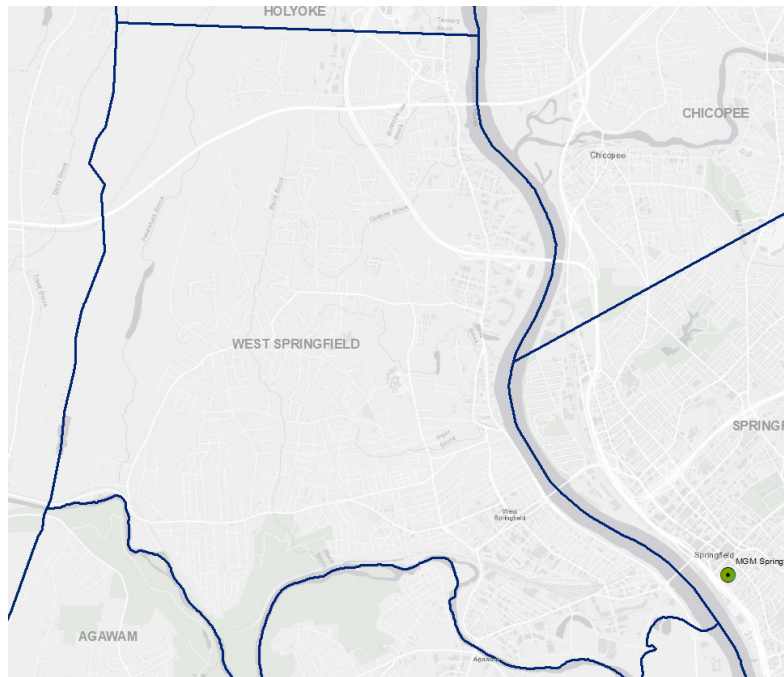
Population (est. 2018): 28,747

Area: 17.5 square miles

Police officers: 89

City center distance from MGM:
3.83 miles

With a large hotel cluster directly across the river from MGM Springfield, it seemed inevitable that West Springfield would see an increase in activity at hotels specifically. Twelve months later, the hotels may have more patrons, but their presence isn't being reflected in any additional crime. Hotel crime in the city is down from the average.

In general, crime is expected or low in the city. A pattern of purse snatchings identified in the first four-month report did not continue, and many other crimes that seemed to have increased initially regressed to the mean over time. The only persistent increase so far have been in traffic collisions and "suspicious activity" calls, both of which could be plausibly related to extra traffic through the community.

Crimes reported to West Springfield, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	1	0	C	0–3	0	Expected
Sexual Assault	28	2	T	22–49	32	Expected
Kidnapping	5	1	C	1–9	6	Expected
Robbery	34	-1	C	26–42	14	Low
Aggravated Assault	119	5	C	94–144	108	Expected
Simple Assault	218	-20	T	124–206	178	Expected
Threats	67	-2	C	50–84	69	Expected
Arson	4	0	C	2–6	4	Expected
Burglary	201	-30	T	95–125	120	Expected
Theft from Persons	7	0	C	3–11	10	Expected
Purse-Snatching	8	-1	C	3–13	8	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Shoplifting	318	10	C	256–380	354	Expected
Theft from Building	145	-6	C	107–183	86	Low
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	126	-14	T	72–142	105	Expected
Theft of MV Parts	2	-1	T	0–2	2	Expected
Other Theft	514	-35	T	330–449	358	Expected
Auto Theft	92	-8	T	49–91	52	Expected
Forgery	34	0	C	31–37	32	Expected
Fraud/Con Games	74	2	C	64–84	113	High
Credit Card Fraud	16	0	C	11–21	12	Expected
Identity Theft	48	2	C	37–59	57	Expected
Employee Theft	9	1	T	8–16	3	Low
Extortion	1	0	T	0–2	0	Expected
Stolen Property	33	-2	T	19–36	26	Expected
Vandalism	330	-19	T	224–307	231	Expected
Drugs	99	-7	C	63–135	121	Expected
Statutory Rape	7	0	C	4–10	5	Expected
Pornography	5	0	C	2–8	7	Expected
Prostitution	3	0	C	0–6	0	Expected
Weapons	10	1	C	3–17	14	Expected
Bad Checks	12	-2	T	3–10	1	Low
Disorderly	33	0	C	24–42	30	Expected
Drunk Driving	26	-1	C	19–33	30	Expected
Drunkenness	1	0	C	0–3	1	Expected
Family Offenses	4	0	C	2–6	5	Expected
Liquor Laws	9	-1	C	4–14	7	Expected
Trespassing	25	1	C	17–33	33	Expected
Violent Total	**471**	**-15**	**T**	**316–508**	**407**	**Expected**
Property Total	**1962**	**-101**	**T**	**1395–1719**	**1573**	**Expected**
Total	**2667**	**-91**	**T**	**1925–2581**	**2234**	**Expected**

Fraud/con games

Very high totals for this category in West Springfield were subjected to a more thorough review of individual cases with the West Springfield Police at the end of the year. The analysis showed that about one-third of the cases were mis-coded credit card frauds and the rest were an odd miscellany of swindles that showed no particular patterns. The analysis should be repeated, however, with incidents reported since the beginning of 2019, as the number has intensified. The Riverdale Shops seem particularly susceptible to such incidents, and we might be seeing a (miscoded) extension of the forgery incidents around Metro Center Springfield.

Selected calls for service reported to West Springfield, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Disturbance	1954	-51	T	1518–1978	1863	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Domestic Dispute	366	39	T	379–667	584	Expected
General Service	729	-45	T	444–685	667	Expected
Suspicious Activity	1204	1	C	1115–1293	1433	High
Traffic Collision	1602	11	C	1504–1700	1744	High
Traffic Complaint	828	43	T	787–1194	1017	Expected

Suspicious Activity

At the end of the four-month report, both disturbances and suspicious activity had increased particularly at businesses and streets just over the two bridges from Springfield, particularly late at night, which might have been evidence of spillover from MGM. In the subsequent eight months, disturbance calls decreased but suspicious activity remained high at businesses on Memorial Avenue, Park Street, and Riverdale Street (see Figure 12). In addition to this spatial relation, calls have increased generally at gas stations throughout the town. Anecdotal evidence suggests that many of these calls are related to panhandlers in the area.
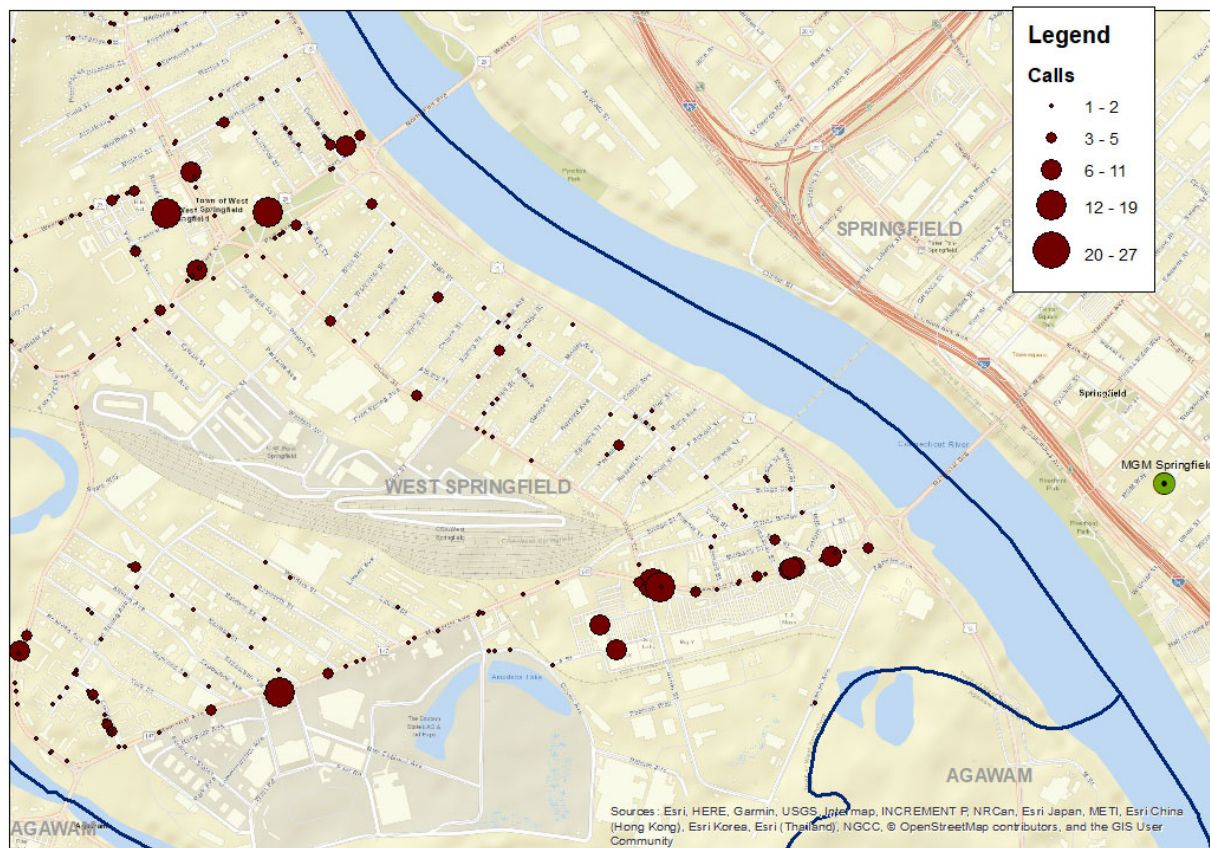

Figure 13: "Suspicious Activity" calls for 2018-2019 show an increase at locations just over the bridges from MGM Springfield.

Traffic Collisions

The increase in collisions reported to CAD mirrors the increase in reported collisions discussed below.

Collisions reported to West Springfield, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	488	8	C	446–530	643	High
Parked vehicle	54	2	C	43–65	100	High
Pedestrian	19	0	C	13–25	26	High
Bicyclist	7	0	C	2–12	4	Expected
Animal	2	0	C	2–3	10	High
Fixed object	54	0	C	50–58	68	High
Curb/barrier	46	-1	C	38–54	52	Expected
Rollover/Jackknife	2	0	C	1–4	3	Expected
Other/Unknown	22	-2	T	11–23	25	High
Total	**696**	**7**	**C**	**650–742**	**931**	**High**

West Springfield showed the sharpest increase in traffic collisions of the participating agencies, with higher-than-expected totals in nearly all categories. The increase began immediately after the opening of MGM and continued throughout the entire year (although was lowest in January and February). The increase is spread uniformly across the days of the week from 08:00 to 20:00. Geographically, as seen in Figure 6, the increase is highest on street segments approaching West Springfield's two bridges to Springfield, particularly on Memorial Avenue, Riverdale Road, and Westfield Street. The increase in crashes makes geographic, temporal, and logical sense as having been caused by extra vehicle traffic heading to MGM.
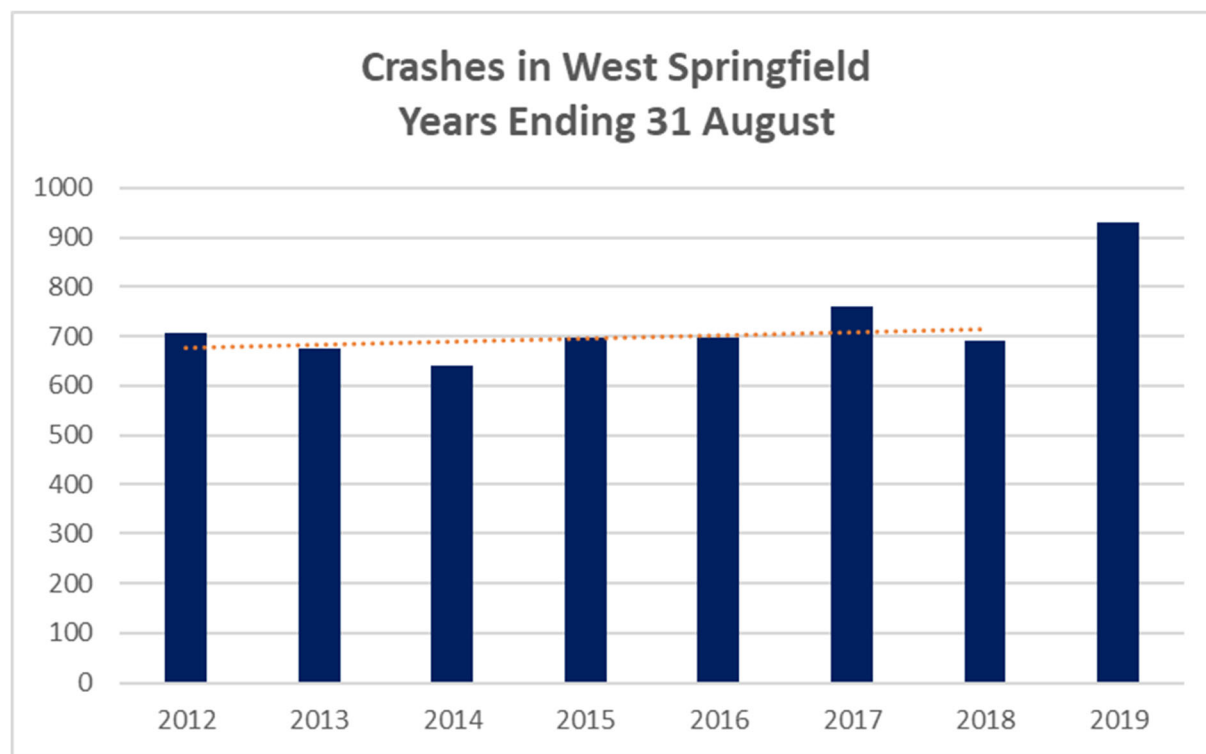

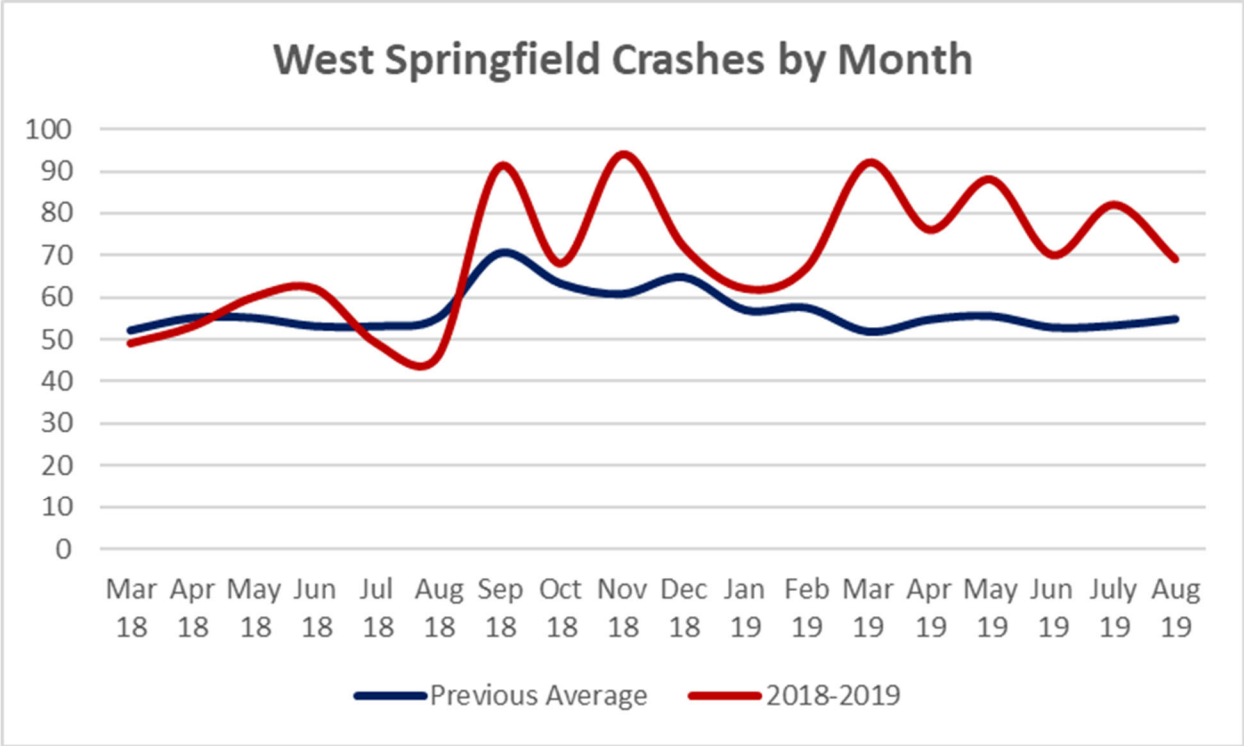*Figure 14: A yearly view of crashes shows a significant increase in the year ending 31 August 2019.*

Figure 15: A month-by-month view shows that the increase started immediately after MGM Springfield opened.
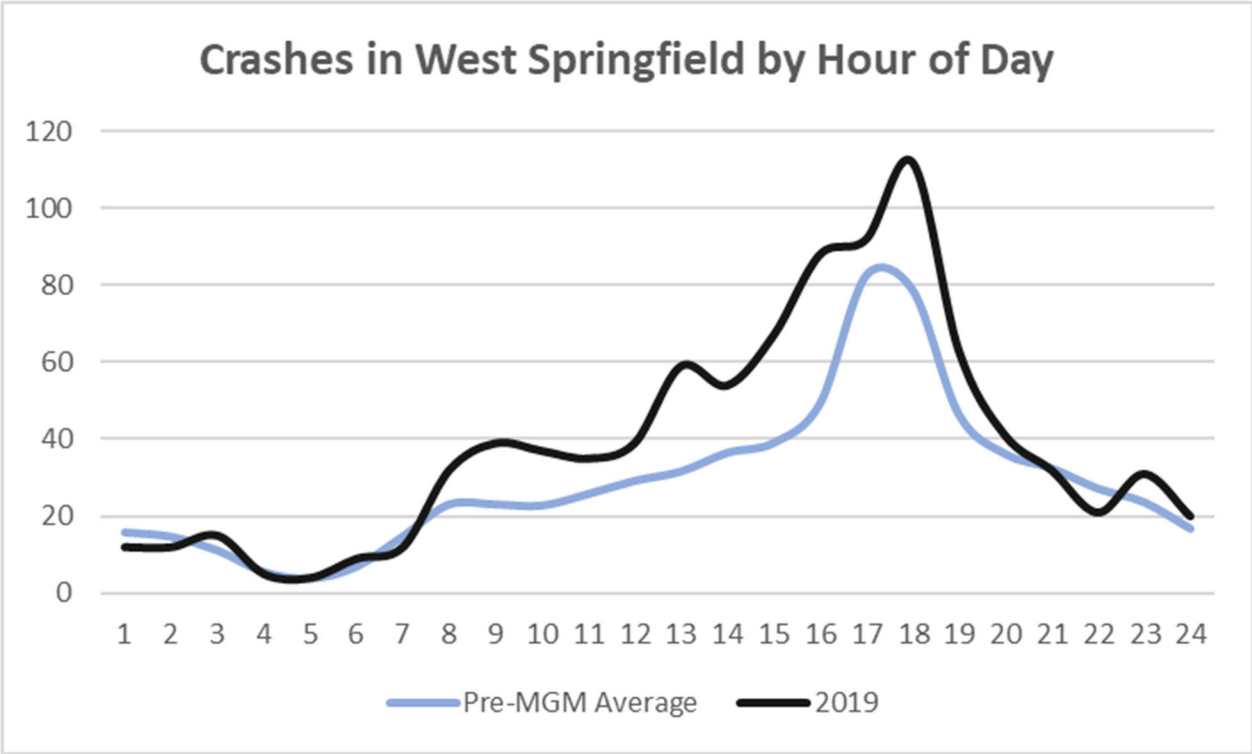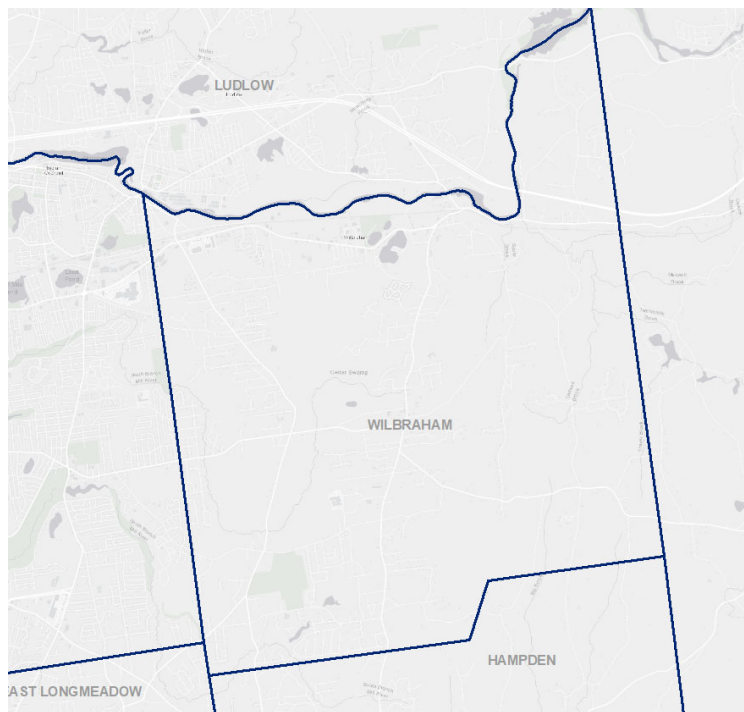

Figure 16: The increase in West Springfield crashes is heaviest from 08:00 to 20:00.

One-year comparison: Wilbraham

Population (est. 2018): 14,749

Area: 22.4 square miles

Police officers: 27

City center distance from MGM:
8.36 miles

Wilbraham is physically close to Springfield but lacks significant travel routes to and from MGM Springfield. A concern going into this study was increased retail crimes along Route 20. There were increased shopliftings at Home Depot and CVS, but these could easily involve changes to store policy rather than actual trends. Overall, the agency experienced total crime and property crime within expected parameters, with a few notable increases discussed below. For calls for service, only hunting-related calls and general service calls increased, neither with a logical casino nexus. Crashes were close to average volumes.

Crimes reported to Wilbraham, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	0	0	C	0–0	0	Expected
Sexual Assault	6	0	C	3–9	11	High
Kidnapping	1	0	C	0–2	0	Expected
Robbery	2	0	C	0–4	1	Expected
Aggravated Assault	12	-1	C	7–17	17	Expected
Simple Assault	48	1	C	36–60	58	Expected
Threats	38	-3	T	18–44	35	Expected
Arson	1	0	C	0–2	0	Expected
Burglary	47	-7	T	16–49	22	Expected
Theft from Persons	1	0	C	0–2	0	Expected
Purse-Snatching	0	0	C	0–1	0	Expected
Shoplifting	31	3	T	26–61	68	High
Theft from Building	22	-3	C	9–36	5	Low

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	24	-3	T	13–32	14	Expected
Theft of MV Parts	1	0	T	1–4	0	Low
Other Theft	81	-8	T	41–74	51	Expected
Auto Theft	14	-1	C	6–23	6	Expected
Forgery	8	0	C	6–10	7	Expected
Fraud/Con Games	16	1	C	9–23	17	Expected
Credit Card Fraud	5	0	C	2–8	8	Expected
Identity Theft	13	1	C	7–19	20	High
Employee Theft	3	-1	T	1–2	0	Low
Extortion	0	0	C	0–0	2	Expected
Stolen Property	8	1	C	5–11	8	Expected
Vandalism	67	-8	T	30–67	51	Expected
Drugs	51	-5	C	19–83	14	Low
Statutory Rape	4	0	C	1–7	4	Expected
Pornography	2	0	C	1–3	3	Expected
Prostitution	0	0	C	0–0	0	Expected
Weapons	4	0	C	1–8	2	Expected
Bad Checks	3	0	C	0–6	1	Expected
Disorderly	12	1	C	7–17	7	Expected
Drunk Driving	56	0	C	25–87	39	Expected
Drunkenness	9	0	C	3–15	10	Expected
Family Offenses	0	0	C	0–1	0	Expected
Liquor Laws	19	0	C	8–31	10	Expected
Trespassing	8	1	C	4–12	7	Expected
Violent Total	**107**	**-3**	**C**	**86–128**	**122**	**Expected**
Property Total	**344**	**-24**	**T**	**213–366**	**279**	**Expected**
Total	**619**	**-47**	**T**	**279–627**	**498**	**Expected**

Sexual assault

Wilbraham recorded 11 sexual assaults during this period, 6 of them during the first four months of 2019, all of them in the "indecent assault/fondling" category. The charges indicate that all but one involved an adult victim. No commonalities in location or location type can be seen among the incidents, and the limited information supplied with such sensitive crimes means that we have to send it back to the agency to comment further.

Shoplifting

The shoplifting increase is localized at two locations: a CVS and a Home Depot. The increases could reflect actual increases in shoplifting at the stores, but its suddenness—and a lack of complementary increases in other stores in the region—suggest that changes in security policy or practice are more likely to credit.

Identity theft

The agency saw a big jump in identify fraud during the last four months of the period (May–August). About half the incidents were reported at the police department.

Selected calls for service reported to Wilbraham, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	10	0	C	6–14	7	Expected
Disabled Vehicle	185	8	C	146–224	196	Expected
Disturbance	145	-3	C	123–167	130	Expected
Domestic Dispute	146	11	T	140–233	159	Expected
General Service	613	4	C	577–649	684	High
Gunshots	25	0	C	19–31	20	Expected
Hunting	3	1	C	0–6	8	High
Lost Property	46	0	C	41–51	43	Expected
Medical	874	53	T	824–1311	1027	Expected
Psychological	35	5	T	47–65	51	Expected
Suspicious Activity	921	-10	C	726–1116	730	Expected
Traffic Collision	391	3	C	369–413	397	Expected
Traffic Complaint	224	12	T	241–304	305	High

General service

An increase in calls for general police services—escorts, lockouts, information and directions, and so forth—might accompany an increase in visitors to the area, but in Wilbraham's case the higher statistics seem to be related to a bump in car seat inspections, which would focus primarily on residents and thus not have a casino nexus.

Hunting

Wilbraham, Agawam, and Hampden are the only three agencies to track hunting complaints. Both Wilbraham and Hampden showed an increase in calls, but not in any way that shares their geography. Incidents in both agencies were heavily concentrated in the 30 November–29 December period, and Wilbraham had three on Saturday, 15 December. The CAD data offers no additional information on the events, which did not continue into 2019.

Traffic complaints

Wilbraham showed a heavy increase in "erratic operator" calls, particular on Boston Road (Route 20) in the summer months of 2019.

Collisions reported to Wilbraham, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Vehicle in traffic	195	-1	C	176–214	185	Expected
Parked vehicle	30	0	C	20–40	31	Expected
Pedestrian	2	0	C	0–5	2	Expected
Bicyclist	2	0	C	0–4	2	Expected
Animal	21	3	T	17–50	37	Expected
Fixed object	48	1	C	39–57	48	Expected
Curb/barrier	21	0	C	13–29	18	Expected
Rollover/Jackknife	2	0	C	0–4	2	Expected
Other/Unknown	14	-1	T	8–14	15	High
Total	**335**	**2**	**C**	**320–350**	**340**	**Expected**

Total collisions were in the normal range in Wilbraham, as were all the individual categories.

One-year comparison: State Police

Figure 17: A network of State Police-patrolled highways and routes feeds the MGM Springfield area.

State Police patrol state highways (principally I-90, I-91, I-291, and I-391) in the Springfield area, plus state properties and parks. They assist local police in response to some crime issues, and in particular have a longstanding partnership with the Springfield Police to patrol hot spots and reduce street violence and gang activity. In 2018, The State Police Gaming Enforcement Unit took over primary enforcement responsibilities at MGM Springfield.

The Massachusetts State Police operates a records system with different conventions and reporting rules than the local agencies, so the categories and totals are not directly compatible. In some cases, where both agencies responded to an incident, the two systems may duplicate each other. The data below comes from a combination of multiple State Police stations, including B-3 (Springfield), B-6 (Northampton), several sections of Troop E eliminated in 2018, and various mobile statewide units such as headquarters units, canine units, and investigators. As with the local agencies, it excludes at MGM specifically, as those were covered in a previous section of the report.

Incidents reported to the State Police in the MGM area, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Abandoned Vehicle	18	5	T	22–54	59	High
Assault	15	0	C	12–18	14	Expected
Building Check	3911	348	T	3347–6501	3918	Expected
Disabled Vehicle	2644	-69	C	2248–3040	2904	Expected
Disturbances	43	1	C	26–60	61	High
Domestic Dispute	19	1	C	13–25	19	Expected
Drugs	53	-9	T	16–68	73	High
General Service	146	-29	T	52–90	148	High
Gunshots	48	11	T	32–152	126	Expected
Lost Property	26	-2	C	16–36	38	High
Medical	111	2	C	77–145	132	Expected
Psychological	10	-1	T	6–12	15	High
Robbery	12	-1	C	6–18	5	Low
Suspicious Activity	49	0	C	29–69	43	Expected
Traffic Collision	1983	57	T	2005–2415	2144	Expected
Traffic Complaint	680	-23	T	431–748	815	High
Trespassing	21	0	C	5–39	12	Expected

As with many of the reporting communities, we see increases in primarily traffic-related incidents, including disabled and abandoned vehicles, traffic complaints, and lost property. Increases in disturbances and gunshots seen during the last four months of 2018 did not continue in 2019.

Abandoned vehicles

This activity category increased in January and February of 2019, particularly on Routes 291 and 391. As with the other traffic-related categories, this one has a logical and geographic connection with extra traffic in the area.

Disturbance

Increased response to the registry of motor vehicles seems to account for most of the increases in this category.

Drugs

An increase in drug activity in 2019 is difficult to analyze because the police barracks itself is listed as the location for over half of the incidents.

General service

There was a large increase in "assist motorist" calls in 2019, particularly on Route 91 in Northampton and Holyoke. There were also a large number on Reservation Road in Holyoke.

Lost property

The increase is made up of about a dozen incidents taken at the State Police barracks itself at 600 Liberty Street. Unfortunately, the limited information provided in the data doesn't provide any other insights into this call.

Psychological

A big jump in "emotionally disturbed person" and "suicide attempt" calls in 2019, scattered throughout the region with no commonalities.

Traffic complaints

Complaints of aggressive driving and erratic operation increased on state roads in this area, particularly Routes 90 and 91. There are no other concentrations by month, day, or time. This again could be reflective of a general increase in traffic in the area.
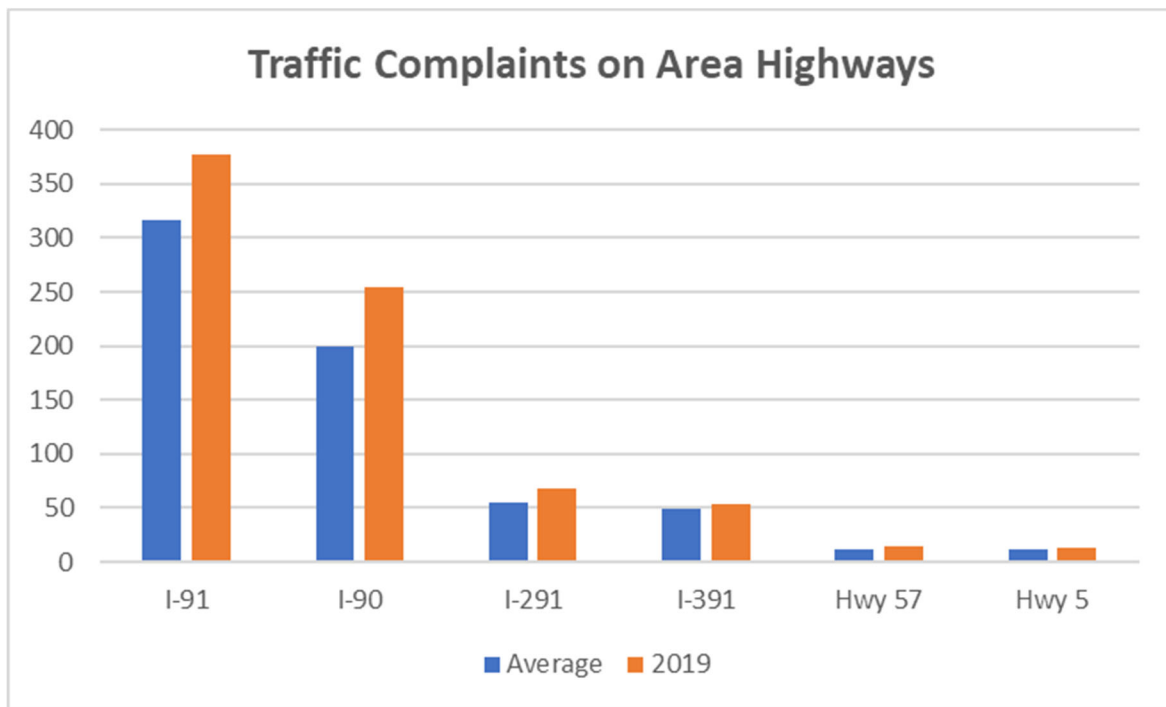

Figure 18: 2019 was marked with extra complaints of erratic driving and aggressive driving on I-91, I-90, and I-291.

Crashes on state roadways, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
I-90	288	4	C	254–322	317	Expected
I-91	972	45	T	997–1303	1059	Expected
I-291	223	3	C	187–259	238	Expected
I-391	166	3	C	152–180	198	High
Hwy 5	109	4	C	83–135	136	High
Hwy 57	65	3	T	66–90	62	Low

Crashes on state roadways had all been within "expected" ranges until the summer of 2019, when I-391 and Hwy 5 hit record-high volumes for the May–August period.

Before-and-after comparison of other variables

Statistics in this section help bolster our understanding of trends in the Springfield area since MGM Springfield opened. It is possible that total volume of particular crimes and calls for service didn't increase, but shifts in other variables happened beneath the surface. For those categories that *did* increase, analysis of these variables can help us understand and explain those increases.

Individuals arrested

Whatever changes happened with crime in the communities, arrests remained essentially at expected values for the region. Agawam was the only agency outside its window, with most of the increase coming April through July of 2019. The agency had a particularly high total of simple assault arrests, as reflected in its statistics for that crime in an earlier section. East Longmeadow and Ludlow balance the Agawam increase by being quite low.

These figures do not include those arrested at MGM Springfield specifically by the State Police, but even if we added them to Springfield's total, the agency would still be within its expected window. MGM Springfield, in short, is not creating any significant burden on the post-police criminal justice system.

Individuals arrested, 1 September–31 August, region

Agency	Pre-MGM Avg.	Slope	Window Type	Pred. Window	2019	Result
Agawam	517	19	C	411–623	699	High
Chicopee	1117	7	C	904–1330	1088	Expected
East Longmeadow	264	38	T	248–524	167	Low
Hampden	121	-10	T	60–128	80	Expected
Holyoke	2936	-177	T	1821–2635	1964	Expected
Longmeadow	93	-10	T	41–74	55	Expected
Ludlow	540	36	T	583–784	582	Low
Northampton	944	-55	T	525–920	655	Expected
Springfield	4621	-53	C	4077–5165	4422	Expected
Wilbraham	596	9	C	473–719	549	Expected
West Springfield	686	-19	T	499–724	711	Expected
Total	12436	-215	T	10444–12711	10972	Expected

Location type

Prior to the opening of MGM Springfield, one common hypothesis is that it would increase activity at the types of places that cater to visitors, such as hotels, gas stations, convenience stores, and transportation hubs. This is not necessarily because we expected that the visiting population would be composed of criminals, but rather a simple recognition that every time you increase the number of people at a location, crimes tend to increase as well.

By and large, this increase has not happened in the first year. Analysis of increases on the preceding pages showed few that were concentrated on specific types of locations. Statistics by type of location below

show that convenience stores, gas stations, banks, hotels, and most retail establishments were well within the predicted window. Restaurant crime actually fell considerably.

The only location type to see an appreciable increase was transportation stations ("air/bus/train terminal"), increasing 40% from its average and reversing a slight decreasing trend. 68% of this volume comes from a single location: Union Station in Springfield. This location saw increases in thefts, fights, and disorderly conduct. As this increase did not start until August, there is a reasonable chance of an MGM connection. We are reaching out to the Amtrak Police to try to get a complete picture of the increases at this location specifically.

Crimes by location type, All offenses, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Air/Bus/Train Terminal	110	-3	C	84–136	165	High
Arena	25	8	T	12–50	16	Expected
Auto Dealership	61	16	T	83–106	82	Low
Bank	360	-3	T	326–367	320	Low
Bar	552	-45	T	291–453	280	Low
Church	188	-13	T	101–183	148	Expected
Construction Site	81	-5	C	55–107	61	Expected
Convenience Store	962	-16	T	794–1007	787	Low
Department Store/Mall	1850	-65	T	1298–1886	1315	Expected
Drug/Doctor/Hospital	758	-1	C	701–815	667	Low
Field/Woods/Park	487	16	T	440–659	438	Low
Gas Station	553	10	C	466–640	556	Expected
Government/Public	1730	1	C	1648–1812	1798	Expected
Grocery	723	1	C	690–756	556	Low
Hotel	529	-19	T	325–584	408	Expected
Jail	36	3	C	19–53	29	Expected
Liquor Store	176	3	C	162–190	126	Low
Office	1711	-96	T	1080–1578	1418	Expected
Parking Lot/Garage	2156	-248	T	941–1580	1255	Expected
Rental Storage	98	1	C	83–113	65	Low
Residence	27828	-661	T	22330–28042	25748	Expected
Restaurant	1009	3	C	916–1102	902	Low
School	1766	-278	T	662–992	883	Expected
Specialty Store	886	-16	C	807–965	724	Low
Street	13992	-343	T	11351–13892	12361	Expected

The only type of location to show unusually high volume overall is transportation terminals—or, in this case, just one terminal: Union Station in Springfield. This re-opened consolidated transportation hub has seen significant volumes of property crime and disorderly conduct in the post-MGM year, and it seems likely that extra train traffic coming to the city to use MGM is at least partly to credit.

Further breakdowns by crime type and specific crime also failed to yield any interesting patterns by location type.

"Last Drink" Locations

According to data received from the Massachusetts Alcoholic Beverages Control Commission, MGM Springfield was named as the location of the "last drink" for **seven** drunk drivers whose cases were adjudicated between 1 August 2019 and 31 January 2020, a number that will likely rise as more cases that resulted in arrest during this period wrap up in court. MGM Springfield is the top single location mentioned by drunk drivers in this dataset, although the many establishments at Foxboro Stadium are divided into different addresses and together make for the top "real" hot spot.

Top "Last Drink" locations from cases adjudicated between 1 July 2019 and 30 January 2020

Location	City/Town	Total
MGM Springfield	Springfield	7
TD Garden	Boston	6
The Still	Agawam	5
The Zone	Springfield	4
Encore Boston Harbor	Everett	4
Scorpion Bar	Foxboro	4
Six String Grill & Stage	Foxboro	4

Whether MGM has a "last drink" problem will become more discernible with more months of data. We will offer a more detailed analysis, as well as counts from the local agencies' own systems, in the next series of reports for the casino.

Geographic analysis

The preceding sections of this report have presented statistics for the 11 participating communities as a whole. For the most part, they have noted few increases in crime. But it's worth ensuring that some smaller trends aren't being overlooked in amidst the large volume of crime and calls for service reported at the agency level.

Metro Center Springfield

MGM Springfield's official address is 1 MGM Way, a street built specifically for the casino. It occupies about half a block bordered by Union Street, Main Street, State Street, and East Columbus Avenue, its construction having obliterated the middle section of Howard Street, which became a couple of driveways on either side of the building. It is at the southeast end of a busy, downtown Metro Center with dozens of businesses, shops, restaurants, and hotels. Its close neighbors include the Springfield District Court, Symphony Hall, the MassMutual Center, Tower Square, the UMass Center at Springfield, and the CityStage performing arts center, and it's a good bet that all of these businesses stand to do more business with MGM bookending their block. Metro Center ends at roughly Union Station to the northwest, just before Route 291 serves as a natural hard boundary to the neighborhood.

An elevated Route 91 runs to the southwest of MGM and the Metro Center area. On the other side is Riverfront Park and a variety of businesses and attractions along Hall of Fame Avenue, including the Naismith Memorial Basketball Hall of Fame. The Connecticut River serves as a hard boundary to the southwest. Northeast and southeast of the Metro Center, mixed business and residential areas sprawl for miles.

Into this area, we have introduced nearly 6 million visitors in a one-year period. These individuals, their cars, their wallets and purses, their trusting natures, are all potential targets for thieves, robbers, con artists, and more. The patrons themselves will occasionally drink too much, talk too loudly, get into fights, and get arrested for disorderly conduct. But at the same time, there are crime suppressors. There are plenty of people to witness criminal activity, to serve as mutual guardians for each other. There dozens of law enforcement officers and security guards within shouting distance, and cameras covering most of the major streets. Nearby businesses are staying open later. Late at night, the streets aren't quite as dark or empty. Which factors win out? The attractors or the suppressors?

For this analysis, we will consider three geographies:

1. The immediate MGM block, including both sides of Main, State, and Union Streets and East Columbus Avenue, but excluding the casino building itself, as there was nothing there but a construction site before September.

2. The larger Metro Center area surrounding MGM, southeast to the Basketball Hall of Fame and northwest to Union Station.

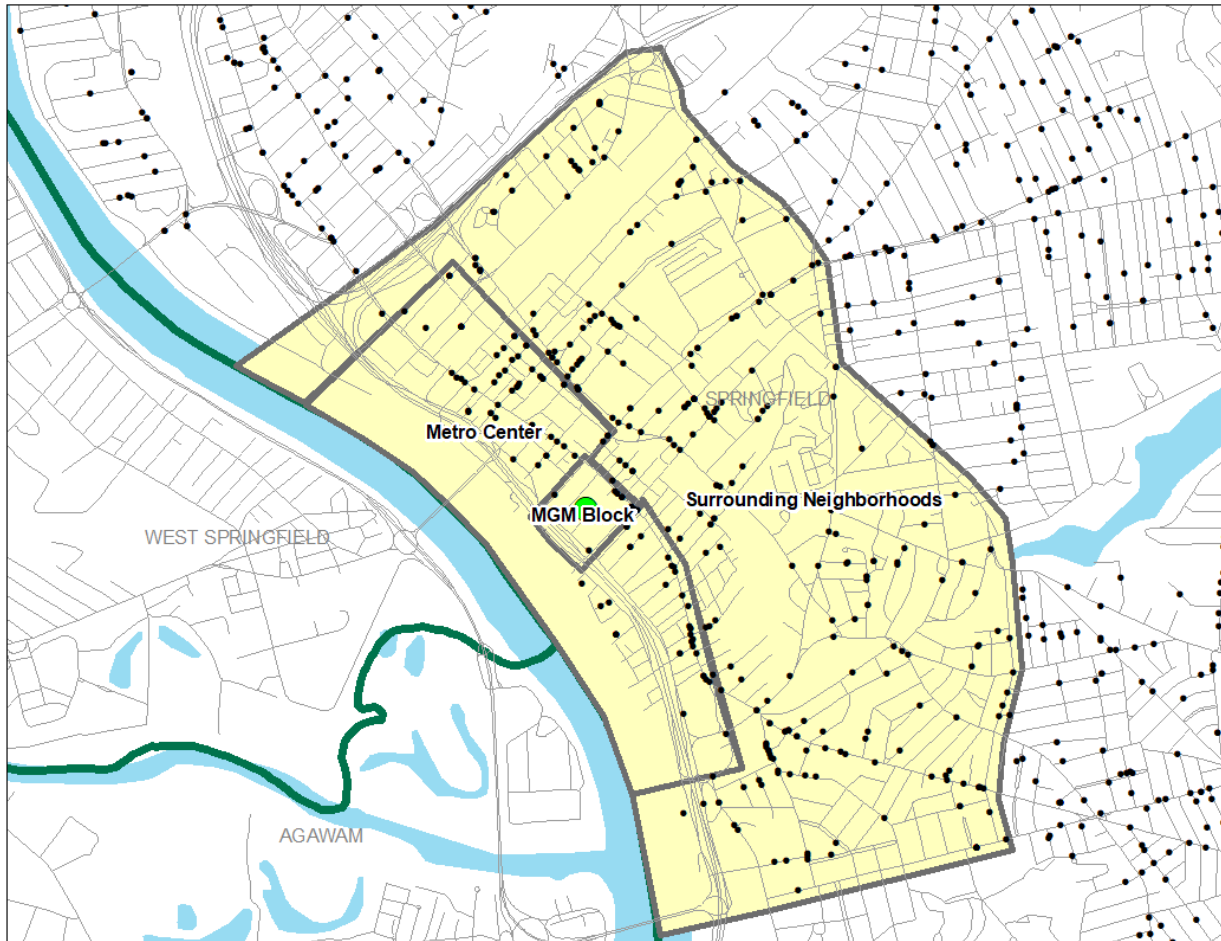3. The mixed business/residential neighborhoods that surround the Metro Center.

Figure 19: The three geographies analyzed in this section. Borders take in both sides of major streets.

To avoid wasting time with very low numbers, I have eliminated (put into the "All Other" category) crimes that reported an average and 2019 figure of less than 2.

Crimes on the MGM block, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Sexual Assault	1	0	C	0–2	2	Expected
Robbery	5	-1	T	1–7	1	Expected
Aggravated Assault	4	0	C	2–6	4	Expected
Simple Assault	15	-1	T	6–18	12	Expected
Threats	7	0	C	4–10	7	Expected
Burglary	6	0	C	3–9	0	Low
Shoplifting	1	0	C	0–3	3	Expected
Theft from Building	4	-1	C	0-8	1	Expected
Theft from Vehicle	12	-1	C	6–18	10	Expected
Other Theft	19	-5	T	2–18	2	Expected
Auto Theft	3	-1	T	0–3	6	High

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Forgery	2	-1	T	0–2	0	Expected
Vandalism	8	0	C	4–12	3	Low
Drugs	3	0	C	1–6	2	Expected
Prostitution	3	-1	C	0–6	1	Expected
Disorderly	5	1	C	2–8	9	High
All other	9	0	C	5–13	13	Expected
Total	**108**	**-9**	**T**	**51–107**	**77**	**Expected**

A mix. Total crime remained almost unchanged on the block. Burglary has been suppressed. Some disorderly patrons have spilled onto the street. Overall, it appears that suppressors and attractors are canceling each other out on the immediate MGM block, resulting in average crime totals.

Four of the six auto thefts during this period were at the Pride gas station at 1211 East Columbus. The Pride station was the only individual address on the block to show significantly more incidents in 2019 than in previous years (23 vs. an average of 10). The location is also the site of all three of the shoplifting incidents reported on the block, three assaults, four threats, and an abduction. There are no specific times of day or days of week for these varied incidents.

Crimes in the Metro Center, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	1	0	C	0–2	1	Expected
Sexual Assault	8	0	C	5–11	15	High
Kidnapping	3	1	C	1–6	6	Expected
Robbery	59	-3	C	45–73	48	Expected
Aggravated Assault	75	-1	C	64–86	61	Low
Simple Assault	209	0	C	175–243	183	Expected
Threats	94	-2	C	82–106	84	Expected
Arson	2	0	C	1–3	0	Low
Burglary	65	-8	T	31–41	36	Expected
Theft from Persons	7	0	C	1–14	6	Expected
Purse-Snatching	2	-1	T	0–4	2	Expected
Shoplifting	24	7	T	42–60	28	Low
Theft from Building	57	-1	C	37–77	70	Expected
Theft from Machine	2	1	T	3–9	4	Expected
Theft from Vehicle	104	-5	C	75–133	82	Expected
Theft of MV Parts	8	3	T	8–19	10	Expected
Other Theft	201	-49	T	43–102	45	Expected
Auto Theft	36	-2	T	18–38	29	Expected
Forgery	16	-1	T	10–17	20	High
Fraud	20	-1	C	16–24	24	Expected
Credit Card Fraud	8	3	T	15–21	16	Expected
Identity Theft	11	-1	T	6–11	10	Expected
Employee Theft	3	0	C	0–6	5	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Extortion	0	0	C	0–1	1	Expected
Stolen Property	10	0	C	6–14	12	Expected
Vandalism	134	-4	C	111–157	109	Low
Drugs	60	0	C	39–81	50	Expected
Statutory Rape	0	0	T	0–0	0	Expected
Pornography	0	0	T	0–0	0	Expected
Prostitution	24	-1	C	11–37	6	Low
Weapons	20	2	C	11–29	24	Expected
Bad Checks	4	-1	T	1–5	1	Expected
Disorderly	62	-8	T	30–68	55	Expected
Drunk Driving	7	-1	T	3–6	3	Expected
Drunkenness	2	0	C	0–4	1	Expected
Family Offenses	4	3	T	4–25	21	Expected
Liquor Laws	5	-1	T	2–6	2	Expected
Trespassing	28	1	C	20–36	28	Expected
Violent Crime	**449**	**-5**	**C**	**405–493**	**398**	**Low**
Property Crime	**710**	**-59**	**T**	**414–586**	**509**	**Expected**
Total Crime	**1374**	**-42**	**T**	**1009–1305**	**1098**	**Expected**

We see basically the same story. An extra 10–15,000 people a day has caused crime to barely budge. Burglary is notably down for area businesses, but thefts from their buildings during the daytime is up; perhaps thieves are looking for unattended purses and wallets in food courts, meeting rooms, and open offices. (L.A. Fitness, a laundromat, and Union Station have all been hit multiple times.) Vice, drugs, liquor, and prostitution are absent or keeping a low profile.

One major concern is an increase in sexual assaults in the area, particularly a concentration of eight reported between May and August 2019. I am unable to analyze these in detail because of limited information provided for this sensitive crime type. The Springfield Police Department's crime analysis unit reported no commonalities among a list of incidents in the area that I did provide.

Crimes in the surrounding neighborhoods, 1 September–31 August

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Murder	4	0	C	2–7	5	Expected
Sexual Assault	43	-1	C	33–53	40	Expected
Kidnapping	13	0	C	10–16	16	Expected
Robbery	159	1	C	141–177	128	Low
Aggravated Assault	266	-4	C	245–287	233	Low
Simple Assault	784	-11	C	707–861	698	Low
Threats	424	-7	C	389–459	342	Low
Arson	9	-1	C	3–15	3	Expected
Burglary	308	-32	T	167–239	149	Low
Theft from Persons	14	1	C	5–23	16	Expected
Purse-Snatching	4	-1	T	1–5	5	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
Shoplifting	26	6	T	42–59	43	Expected
Theft from Building	176	-5	C	113–239	185	Expected
Theft from Machine	3	2	T	4–16	8	Expected
Theft from Vehicle	257	-19	T	156–262	194	Expected
Theft of MV Parts	38	15	T	60–108	51	Low
Other Theft	582	-148	T	122–214	127	Expected
Auto Theft	138	-5	T	98–139	122	Expected
Forgery	30	-1	C	21–39	33	Expected
Fraud	50	-1	C	41–59	54	Expected
Credit Card Fraud	22	7	T	36–53	44	Expected
Identity Theft	76	-10	T	34–59	49	Expected
Employee Theft	7	0	C	6–8	6	Expected
Extortion	1	0	T	0–3	8	High
Stolen Property	33	-1	T	23–35	28	Expected
Vandalism	493	-13	T	360–521	411	Expected
Drugs	226	9	C	172–280	184	Expected
Statutory Rape	2	-1	T	0–4	2	Expected
Pornography	3	0	C	1–6	6	Expected
Prostitution	39	-6	T	22–50	22	Expected
Weapons	98	6	T	83–157	122	Expected
Bad Checks	7	-1	T	2–6	1	Low
Disorderly	138	-12	T	80–139	110	Expected
Drunk Driving	16	-2	T	7–16	12	Expected
Drunkenness	3	-1	T	0–5	2	Expected
Family Offenses	31	19	T	41–139	111	Expected
Liquor Laws	14	1	C	9–19	11	Expected
Trespassing	105	12	T	112–189	124	Expected
Violent Crime	**1692**	**-20**	**T**	**1487–1737**	**1462**	**Low**
Property Crime	**2266**	**-204**	**T**	**1327–1625**	**1536**	**Expected**
Total	**4638**	**-131**	**T**	**3627–4391**	**3705**	**Expected**

Crime is down in the surrounding mixed residential/business neighborhoods—the lowest level in at least 9 years. Violent crime and burglaries are particularly low. Thefts from vehicles have increased elsewhere, but not here.. Overall, the statistics suggest that the influence of the casino is largely contained to its immediate area.

Exit Radiuses

One of the original hypotheses of this study was that crime would increase at facilities near highway exits to and from MGM Springfield. Such a trend did not come to pass. Whether we consider all exit radiuses and individual crime, or individual radiuses and all crimes, no combination outperforms its expected values for the period.
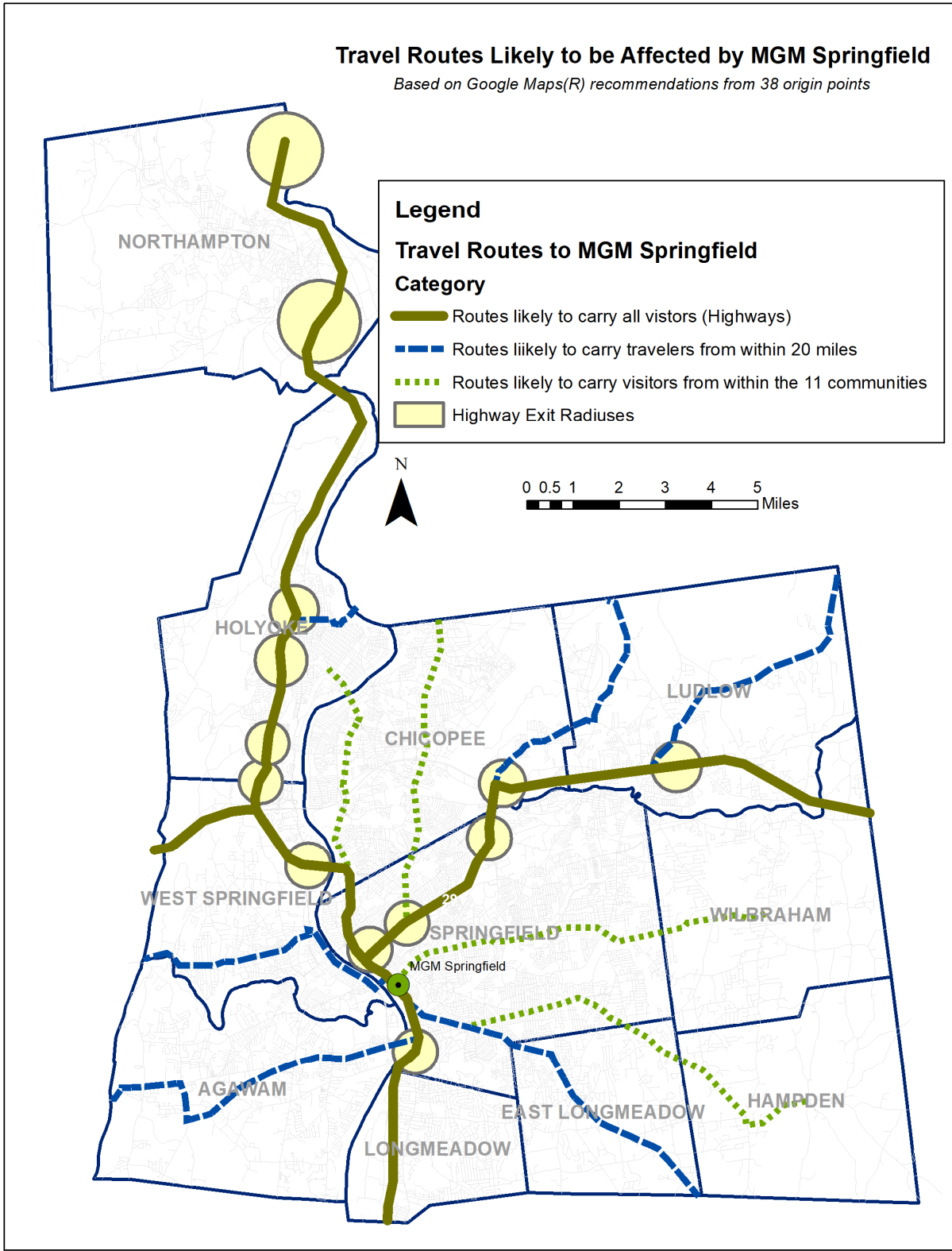
Figure 20: An analysis of crimes and calls for service only in "exit radiuses" shows no category higher than their expected values.

Crimes in exit radiuses, September 2018–August 2019

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
CH 90 Exit 6	66	-8	T	27–54	48	Expected
HO 91 Exit 15	806	-41	T	579–707	684	Expected
HO 91 Exit 16	329	-8	C	287–371	218	Low
HO 91 Exit 17	191	-12	T	105–206	155	Expected
LU 90 Exit 7	201	-1	C	172–230	149	Low
NH 91 Exit 18	503	-41	T	289–392	357	Expected
NH 91 Exit 21	16	0	C	7–25	4	Low
SP 291 Exit 3	848	-48	T	548–767	708	Expected
SP 291 Exit 5	109	-10	T	63–98	84	Expected
SP 91 Exit 2	77	3	C	62–92	41	Low
SP 91 Exit 9	801	-41	T	515–791	771	Expected
WS 91 Exit 13	464	9	C	414–514	459	Expected
Total	4411	-197	T	3299–3949	3678	Expected

The same is true of calls for service. The table below lists all reactive calls for service in the same exit radiuses and finds no indication of higher activity based on extra commuting traffic.

Calls for service in exit radiuses, September 2018–August 2019

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
CH 90 Exit 6	458	0	C	344–572	469	Expected
HO 91 Exit 15	1785	-26	T	1552–1809	1557	Expected
HO 91 Exit 16	1803	18	C	1704–1902	1732	Expected
HO 91 Exit 17	1101	-20	C	1002–1200	1134	Expected
LU 90 Exit 7	1847	101	T	1966–2536	2048	Expected
NH 91 Exit 18	4048	-93	T	3215–4136	3767	Expected
NH 91 Exit 21	157	4	C	130–184	153	Expected
SP 291 Exit 3	3918	218	T	4220–5362	4751	Expected
SP 291 Exit 5	731	32	T	680–1037	866	Expected
SP 91 Exit 2	502	34	T	575–701	558	Low
SP 91 Exit 9	3957	295	T	4575–5702	4856	Expected
WS 91 Exit 13	1729	28	T	1737–1944	1905	Expected
Total	22036	591	T	22417–26383	23796	**Expected**

A similar analysis based on count of crashes finds *one* anomaly: the radius around Exit 13 from Route 91 in West Springfield. This is consistent with previous data showing that West Springfield in general had a higher incidence of traffic collisions during the year after MGM opened.

Crashes in exit radiuses, September 2018–August 2019

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
CH 90 Exit 6	57	5	T	41–116	55	Expected
HO 91 Exit 15	183	2	C	163–203	158	Low

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2019	Result
HO 91 Exit 16	121	4	C	99–143	118	Expected
HO 91 Exit 17	87	3	T	85–114	89	Expected
LU 90 Exit 7	153	16	T	191–245	194	Expected
NH 91 Exit 18	87	-2	C	78–96	59	Low
NH 91 Exit 21	7	0	C	4–12	11	Expected
SP 291 Exit 3	186	9	T	163–279	227	Expected
SP 291 Exit 5	81	6	T	76–130	97	Expected
SP 91 Exit 2	36	3	T	31–63	29	Low
SP 91 Exit 9	195	11	T	169–308	217	Expected
WS 91 Exit 13	81	-3	C	67–95	116	High
Total	**1276**	**54**	**T**	**1318–1666**	**1370**	**Expected**

Conclusion and future plans

This report being a 12-month scan, there are several datasets yet unavailable that will allow us to expand this analysis in future reports. As time passes, we will be able to incorporate the following:

- An analysis of transit crime through the cooperation of the Amtrak Police.

- An analysis of changes in the MGM Springfield area compared to control areas and the rest of the state. This will become possible when a full set of statewide NIBRS data is available, probably in early 2020.

- A comparative analysis of traffic collisions in the Springfield area versus control areas. This probably will not be possible until a public statewide crash dataset is available, likely in 2021.

- Comparison of MGM Springfield with other casinos, normalized by the number of annual visitors each facility receives. We are currently the process of collecting data from comparison casinos nationwide.

- An analysis of the influence of special events at MGM on the surrounding communities on those event nights.

- An analysis of activity at specific hotels in the region.

The Massachusetts Gaming Commission and author of this report have both received a number of questions from partners and stakeholders concerning the possible growth of human trafficking, particularly sex trafficking, in the area. Police statistics are a poor measure of "hidden" crimes like human trafficking, and thus we must look to more creative ways to blend information and intelligence from a variety of sources. To this end, the MGC will be commissioning a meeting of experts to discuss the issue, and to hopefully create an analytical process that will allow us to report better on this potential phenomenon in future reports.

Appendix: Abbreviations and definitions

Acronyms and abbreviations

CAD	Computer-aided Dispatch (system)	A police database that holds information about police dispatches to calls for service, including incidents discovered by police officers. Some but not all of the incidents reported in CAD are crimes and have longer records in the RMS.
IBR	Incident-based reporting	See NIBRS.
MGC	Massachusetts Gaming Commission	The commonwealth agency charged with overseeing and regulating gaming in Massachusetts
FBI	Federal Bureau of Investigation	National investigative agency, part of the U.S. Department of Justice, in charge of collecting national crime statistics.
IACA	International Association of Crime Analysts	A global nonprofit professional association that provides training, literature, and networking to individuals who analyze crime data.
MACA	Massachusetts Association of Crime Analysts	A nonprofit professional association that provides training, literature, and networking to individuals who analyze crime data in New England.
NIBRS	National Incident-based Reporting System	FBI program for data collection that supersedes UCR. Collects more specific data about a wider variety of crimes. With only a few exceptions, all Massachusetts agencies report to NIBRS and all Massachusetts RMS vendors have implemented NIBRS coding standards.
ODBC	Open Database Connectivity	A technology developed by Microsoft that allows any application that uses a database to connect to any database source. The primary mechanism by which we can extract data from police CAD and RMS databases.
PPC	Plainridge Park Casino	Massachusetts's first casino, a slot machine-only parlor in Plainville, opened in June 2015.
PVTA	Pioneer Valley Transit Authority	The organization that operates bus service and other public transportation in western Massachusetts.
RMS	Records Management System	A police data system that stores information about crimes and offenders. See also CAD.

| SEIGMA | Social and Economic Impacts of Gaming in Massachusetts | A multi-year research project hosted by the University of Massachusetts Amherst School of Public and Health Sciences. The SEIGMA project has a much broader mandate for its study than just crime. |
| UCR | Uniform Crime Reporting (program) | National program for the reporting of crime statistics to the FBI. Captures only summary data about a limited number of crime types. Contrast with NIBRS. |

Crime definitions

The following are definitions of the crime categories used in this report. These are mostly drawn without modification from the FBI's definitions for NIBRS crime categories. In almost all cases, *attempts* to commit these crimes are counted equally with completed offenses. These crimes must, of course, be reported to the police to be included in this report.

Aggravated Assault: An attack by one person upon another for the purpose of inflicting severe bodily injury. Aggravated assault is either accompanied by the use of a deadly weapon (e.g., gun, knife, club) or some mechanism that would result in serious harm (e.g., pushing someone down a staircase), or by serious injury even with a weapon that isn't normally "deadly" (e.g., punching someone and breaking his jaw). If the incident involved neither a deadly weapon nor serious injury, it's coded as a simple assault instead.

Arson: Intentional burning of a structure, vehicle, or personal property.

Auto theft: Thefts of vehicles capable of operating under their own power, including automobiles, trucks, buses, motorcycles, and snowmobiles.

Bad checks: The issuance of checks on accounts with insufficient funds. This type of crime is typically only reported by police when an arrest is made or an individual is charged.

Burglary: Unlawful entry of a structure, including residences, commercial buildings, and government buildings. The entry does not have to occur by force (e.g., a "break-in"). The usual motive for burglary is to steal something inside, but this isn't a necessary part of the definition.

Counterfeiting/forgery: Use or possession of an altered, copied, or imitated negotiable or non-negotiable instrument, including U.S. currency, checks, and money orders.

Credit card fraud: Use of a stolen credit card or credit card data to obtain goods or services.

Disorderly: Disorderly conduct that rises to the level of a criminal charge.

Drug offenses: Manufacturing, sale, trafficking, transporting, or possession of controlled substances. Typically, "incidents" of such crime are arrests, as the only way such incidents are reported is when they are discovered by the police.

Drunk driving: Operation of a motor vehicle while intoxicated; usually while above a state-designated legal blood alcohol level. As with many of the drug and alcohol categories, such incidents are only reported when discovered by the police, usually resulting in an arrest.

Drunkenness: Naturally, not all incidents of intoxication are a police matter. Police incidents that fall into this category are usually incidents of either public intoxication or individuals so dangerously intoxicated that they are placed into protective custody until sober.

Employee theft: Also, "embezzlement." Theft of an employer's property by an employee.

Extortion: Theft or attempted theft of money, goods, or services through non-violent coercion.

Family offenses: Unlawful, nonviolent acts by a family member that threaten the physical, mental, or economic well-being of another family member and are not classified under any other category. This category is only reported when someone is charged, and it almost always involves violations of restraining orders or child neglect.

Forgery: Forgery of personal checks, business checks, U.S. currency, or similar negotiable and nonnegotiable documents.

Fraud. Theft of property by lying in such a way that convinces a victim to surrender money or goods. It is theft through some kind of scheme, "con game," or ruse.

Gambling offenses: Crimes related to illegal gambling, promoting gambling, operating gambling machines, bookmaking, and sports tampering.

Identity theft: Representation of oneself as another (actual) person or use of another person's identifying information to obtain goods or services, housing, medical care, or status.

Kidnapping: The abduction of one person by another, whether through force or guile. Most incidents coded as such as "custodial" kidnappings involving a parent taking a child in violation of a custodial agreement.

Liquor law violations: Illegal manufacturing, sale, possession, or consumption of intoxicating drinks, often because the offender is below the legal age.

Murder: the killing of one person by another, including non-negligent homicides.

Other thefts: A general category that includes thefts of services (e.g., gas drive-offs), thefts from persons (e.g., pocket-picking), thefts from outdoor public areas. Essentially, any non-burglary, non-robbery theft that is not covered in one of the "theft" or "shoplifting" categories (below) is categorized here.

Pornography: Possession, sale, or manufacturing of illegal pornography. Because pornography is legal in Massachusetts, such incidents generally involve minors, either as the subjects or recipients of the pornography.

Property crime: An aggregate category that sums the totals of arson, burglary, thefts from persons, purse snatching, shoplifting, thefts from buildings, thefts from machines, thefts from vehicles, thefts of vehicle parts, other theft, auto theft, forgery, fraud, credit card fraud, identity theft, employee theft, extortion, stolen property, and vandalism.

Prostitution: Promotion or participation of sexual activities for profit. As with drug offenses, most "incidents" of prostitution are arrests, as the crime is rarely reported except when discovered by the police.

Purse snatching: A theft in which an offender grabs a purse off the arm of the victim. If any significant force, violence, or threats are employed, this crime becomes a robbery.

Robbery: Taking or attempting to take anything of value from another person by force or violence or threat of force or violence. "Muggings" and "hold-ups" are examples of robberies. A robbery requires a direct confrontation between the offender and victim; houses and buildings cannot be "robbed."

Sexual assault: Any sexual act directed against another person (of either sex), either by force or otherwise against the person's will, or non-forcibly but when the victim is incapable of giving consent because of temporary or permanent mental or physical incapacity. This category combines rapes, indecent assaults, molestation, and sexual penetration with an object.

Shoplifting: Thefts of items offered for sale at retail establishments.

Simple assault: An assault that does not involve a dangerous weapon and does not result in significant injury.

Statutory rape: Nonforcible sexual activity with an individual who is unable to give legal consent because of age.

Stolen property offenses: Possession or sale of property previously stolen including motor vehicles and personal property. Often, the person possessing the property is the one who stole it in the first place, but this category is used when the actual thief cannot be determined.

Thefts from buildings: Thefts of items from commercial or government buildings open to the public, where such entry does not constitute burglary. This often takes the form of thefts of employees' property at businesses open to the public.

Thefts from machines: Thefts from coin-operated machines, either for the coins or for the products inside.

Thefts from persons: Thefts of personal property from the direct control of the owner. These often take the form of pocket-pickings or thefts of or from diners' purses at restaurants. If any force, violence, or threats are employed, this crime becomes a robbery.

Thefts from vehicles: Thefts of items from motor vehicles. The category includes breaking into vehicles (e.g., smashing a window), unlocked entry, and thefts of items from a vehicle's exterior, such as pickup truck beds. Note that thefts of vehicle parts are in a separate category.

Thefts of vehicle parts: Theft of parts or accessories from motor vehicles, including wheels, license plates, and engine parts.

Threats: Threats to commit physical violence by one person against another. If any weapon is actually displayed or employed, or if an assault is actually attempted, the crime is categorized as a simple or aggravated assault instead.

Trespassing: Illegal entry to a non-public part of a residence or business. Such entry is rarely to the *interior* of the property, or it would be coded as burglary instead. Most reportable incidents of trespassing are either after notice (e.g., a repeat shoplifter who is ordered not to return to a store) or at posted locations (e.g., construction sites, abandoned buildings).

Vandalism: Destruction or defacement of public property, buildings, vehicles, or personal property.

Violent crime: An aggregate category that sums totals for murder, sexual assault, kidnapping, robbery, aggravated assault, simple assault, and threats.

Weapon offenses: Possession, sale, or manufacturing of illegal weapons. This is often an additional offense discovered by police during arrests for other crimes.

Call for service definitions

Calls for service include both criminal and noncriminal police incidents and activities. In the case of criminal activities, such incidents receive a longer, more detailed report in the police records management system, and it so it makes more sense to analyze them using the crime categories above than in their original call-for-service form. Thus, the only incident types we have selected for analysis in this report are noncriminal. Definitions of those types appear below. Because the police officer does not usually write a full report for calls for service, the dataset available for analysis is more limited.

Administrative: A wide variety of call types that have to do with the administration of a police department, such as delivery of documents to businesses or other government facilities, attendance at meetings, vehicle maintenance, or even meal breaks. Agencies use their call-for-service systems to document such activities so that, later, they can determine what a particular officer or unit was doing at a particular time, although the incidents are not truly "calls for service." Practices differ significantly between police agencies as to what is reported under this category, and it is generally not useful for analysis.

Alarm: A burglar, panic, or medical alarm that required a response but (probably) turned out to be false or would have a different final code.

Animal complaint: Calls involving sick, dangerous, or wild animals, animals in danger (e.g., left in a hot or cold car), or loose or noisy pets.

Assist other agency: A call type that involves rendering aid to a neighboring police or other government agency for any number of purposes, including serious crimes, fire and medical issues, and traffic issues.

Crime enforcement: Any number of pro-active police activities meant to deter crime, generally taking the form of a "directed patrol" to a particular location during a peak time for criminal activity (based either on citizen complaints or internal analysis). Though not a technical "call for service," such incidents are recorded in the CAD database to document the officer's activity.

Disabled vehicle: A call for service for a vehicle suffering physical or mechanical trouble, usually broken down in an active roadway.

Disturbance: Any of a variety of types of disorderly conduct, disputes, fights, and excessive noise.

Domestic dispute: A dispute between family members, spouses, or intimate partners that has not risen to the level of physical violence.

General service: Minor calls for service that involve rendering aid to residents and visitors for a variety of issues such as giving directions, installing car seats, dealing with lockouts, and providing physical aid.

Gunshots: Reports of gunshots fired, whether phoned in by a resident or received from automatic detection services.

Hunting: Reports of hunters hunting off-season, in protected areas, with illegal gear, or in an unsafe manner.

Lost property: Calls for service involving lost personal property such as wallets and mobile phones. If there is any indication of theft, these incidents are typically reported under the appropriate crime category.

Medical aid: All calls for medical aids except unattended deaths and overdoses. Police responses only are included in the figures in this report.

Missing person: a runaway or other missing person.

Prisoner transport: documentation of a police agency transporting an arrested person from one facility to another.

Psychological issue: Calls for service involving individuals with mental health issues.

Suspicious activity: Any suspicious person, vehicle, or other activity, whether identified by an officer or citizen.

Traffic collision: A collision involving at least one motor vehicle.

Traffic complaint: Complaint about reckless driving, illegal or unsafe parking, or other traffic issues.

Trespassing: Trespassing on private or public property.

Vehicle stop: An officer pulls over a vehicle for a moving or equipment violation.

Warrant service: a call type that documents the service, or attempted service, of an arrest warrant or search warrant. The category is entirely police-directed.

Youth disorder: Disorderly incidents involving youths congregating, skateboarding, making noise, and so forth.

Offense types by associated crime category

Offense	Category
Aggravated Assault	Violent Crime
All Other	Other Crime
Arson	Property Crime
Auto Theft	Property Crime
Bad Checks	Property Crime
Burglary	Property Crime
Credit Card Fraud	Property Crime
Disorderly	Societal Crime
Drug Equipment Offense	Drug/Alcohol Crime
Drug Offense	Drug/Alcohol Crime
Drunk Driving	Drug/Alcohol Crime
Drunkenness	Drug/Alcohol Crime
Employee Theft	Property Crime
Extortion	Property Crime
Family Offenses	Other Crime
Forgery	Property Crime
Fraud/Con Games	Property Crime
Gambling	Societal Crime
Identity Theft	Property Crime
Kidnapping	Violent Crime

Offense	Category
Liquor Law Violations	Drug/Alcohol Crime
Murder	Violent Crime
Other Thefts	Property Crime
Peeping Tom	Other Crime
Pornography	Societal Crime
Prostitution	Societal Crime
Robbery	Violent Crime
Runaway	Other Crime
Sexual Assault	Violent Crime
Shoplifting	Property Crime
Simple Assault	Violent Crime
Statutory Rape	Other Crime
Stolen Property Offense	Property Crime
Thefts from Buildings	Property Crime
Thefts from Vehicles	Property Crime
Thefts of Vehicle Parts	Property Crime
Threats	Violent Crime
Trespassing	Other Crime
Vandalism	Property Crime
Weapon Offenses	Societal Crime

TK final pagination