

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

*Analysis of changes in police data following four
months of activity at MGM Springfield*

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19 May 2019

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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 relationship.** Anyone who cites or reports the statistics without a thorough consideration of additional factors is using this report irresponsibly.

Executive summary

Briefest summary possible

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 four months after MGM opened, several property crime patterns that may be related to the casino were reported in nearby communities, but the casino does not seem to be associated with many large-scale, widespread increases in crime aside from what is reported at the casino itself. Traffic-related calls, including collisions, increased, particularly to the south and west of Springfield.

About this report

- The primary purpose of this report is 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 in later reports.
- Data was collected from the records management systems of the Springfield, Agawam, East Longmeadow, Hampden, Holyoke, Longmeadow, Ludlow, Northampton, West Springfield, and Wilbraham Police Departments and the Massachusetts State Police. Technology issues prevented collection from the Chicopee Police Department (otherwise participating in this project) in time for this report. Crime, calls for service, and collisions during the period of September–December of 2018 were compared to the same months over the previous 5 to 8 years, depending on the data quality of the participating agency.
- Any significant increases were analyzed in more detail with available quantitative data.
- To determine likelihood of a casino relationship, 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.
- Since many of the crimes in these communities were on downward or upward trends, the report compares 2018 to a range of “expected” values depending on the strength of the past trend.

Major findings

- Hosting more than 1.5 million visitors in its first four months of operation, MGM Springfield generated more calls for service, arrests, and crime reports than any other location in the region. The Gaming Enforcement Unit reported the equivalent of 1,751 calls for service at the establishment between 24 August and 31 December and made 115 arrests. The Springfield Police Department responded to the location 903 times and recorded 118 crimes. Whether these figures are objectively “high” depends on comparative statistics from other casinos, which we do not yet have. Comparisons made by the media to Plainridge Park's statistics are spurious given the vastly different nature and traffic level of the two facilities.
- Although MGM Springfield is now the Springfield Police Department's top location, it only contributed 1.9% to the city's violent crime total, 1.1% to its property crime total, 1.9% to its overall crime total, and 1.1% to its calls for service (see the appendix for those crimes included in the violent and property crime totals).
- More than 90% of the criminal incidents reported at MGM Springfield were closed by arrest.

- As expected, the participating communities reported a variety of increases and decreases. I analyzed any offense or call-for-service category that was above an 85% predictive window for the agency. Most of these crimes, once analyzed, have failed to show an MGM relationship.
- So far, we have no confirmation of specific offenders with gambling motivations, but neither have we asked for such data. Increases that are possibly or likely related to MGM, based on the totality of circumstantial evidence, include:
 - A pattern of nighttime thefts from vehicles and other residential thefts in neighborhoods southeast of MGM in Springfield, East Longmeadow, and Longmeadow. This isn't a new pattern so much as an intensification of a longstanding problem.
 - A small pattern of thefts from vehicles immediately adjacent to MGM.
 - An increase in traffic collisions and traffic complaints, particularly in Agawam, West Springfield, and Longmeadow as well as Springfield immediately around the casino.
 - An increase in thefts, fights, and disorderly conduct at Union Station in Springfield.
 - A pattern of disturbance and suspicious activity calls on streets and at retail establishments in West Springfield near the Springfield bridges.
 - A series of purse snatchings along Riverdale Street in West Springfield.
- Increases with an uncertain relationship to MGM that must be analyzed further, ideally with full police narratives for the associated incidents, include:
 - An increase in sexual assaults in Springfield. A handful are on the immediate adjacent blocks to MGM.
 - An increase in domestic violence in Ludlow, Wilbraham, and the area at large. (West Springfield and East Longmeadow also reported increases in simple assaults, but these did not seem to be domestic.)
 - An increase in bad checks and forged checks in Northampton and Agawam.
 - A pattern of fraud incidents in Springfield coded as "extortion."
- Except for the incidents in West Springfield mentioned above, we have not seen hypothesized increases at facilities likely to serve visiting patrons, such as hotels, restaurants, bars, convenience stores, and gas stations.
- The block immediately around MGM as well as the Metro Center in general showed only a few increases given the large number of people now visiting the area. Attractors and suppressors of crime seem to have largely neutralized each other.

Background and methodology

Background

In 2014, the Massachusetts Gaming Commission, in an effort to better assess the impacts of new gaming facilities across the state, commissioned a series of efforts to study, assess, and prepare for the social and economic impacts of gambling. 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. For public safety issues specifically, however, the MGC felt it best to contract with someone with direct experience analyzing the crime, call-for-service, and collision records collected daily by Commonwealth police agencies.

While many studies had attempted to study the effects of gambling on overall rates for 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, three 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 first report that investigates that casino’s impact 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	Three-month analysis of MGM Springfield	This report
July 2019	Eight-month analysis of MGM Springfield	

Issued	Report	Notes
August 2019	Baseline analysis of Encore Boston Harbor area	
December 2019	One-year analysis of MGM Springfield	
December 2019	Four-year analysis of Plainridge Park	

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 information specific enough to identify any person (offender or victim) was collected, 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 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.

Case#	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 four months 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 December.

Throughout these reports, our goal has been to present the data using the simplest statistics possible, ensuring a reader without statistical education can still interpret the results. Unfortunately, for this report we had to use slightly more complex statistics than in previous reports to account for the trends already present in the Springfield area when it comes to crime, crashes, and calls for service.

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:

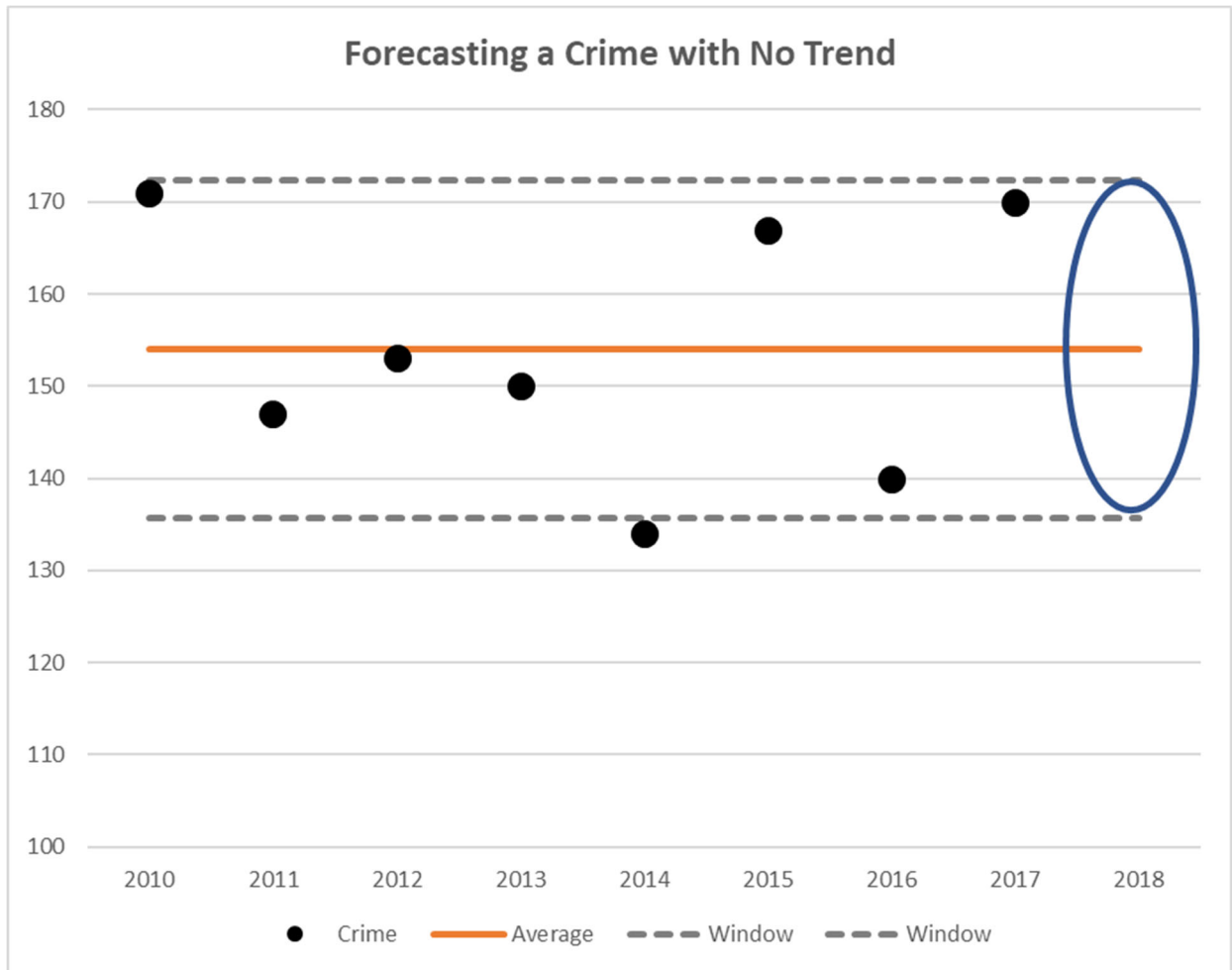


Figure 2: If a crime shows no trend over time, expected values are predicted using its average and standard deviation from the average.

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 this example:

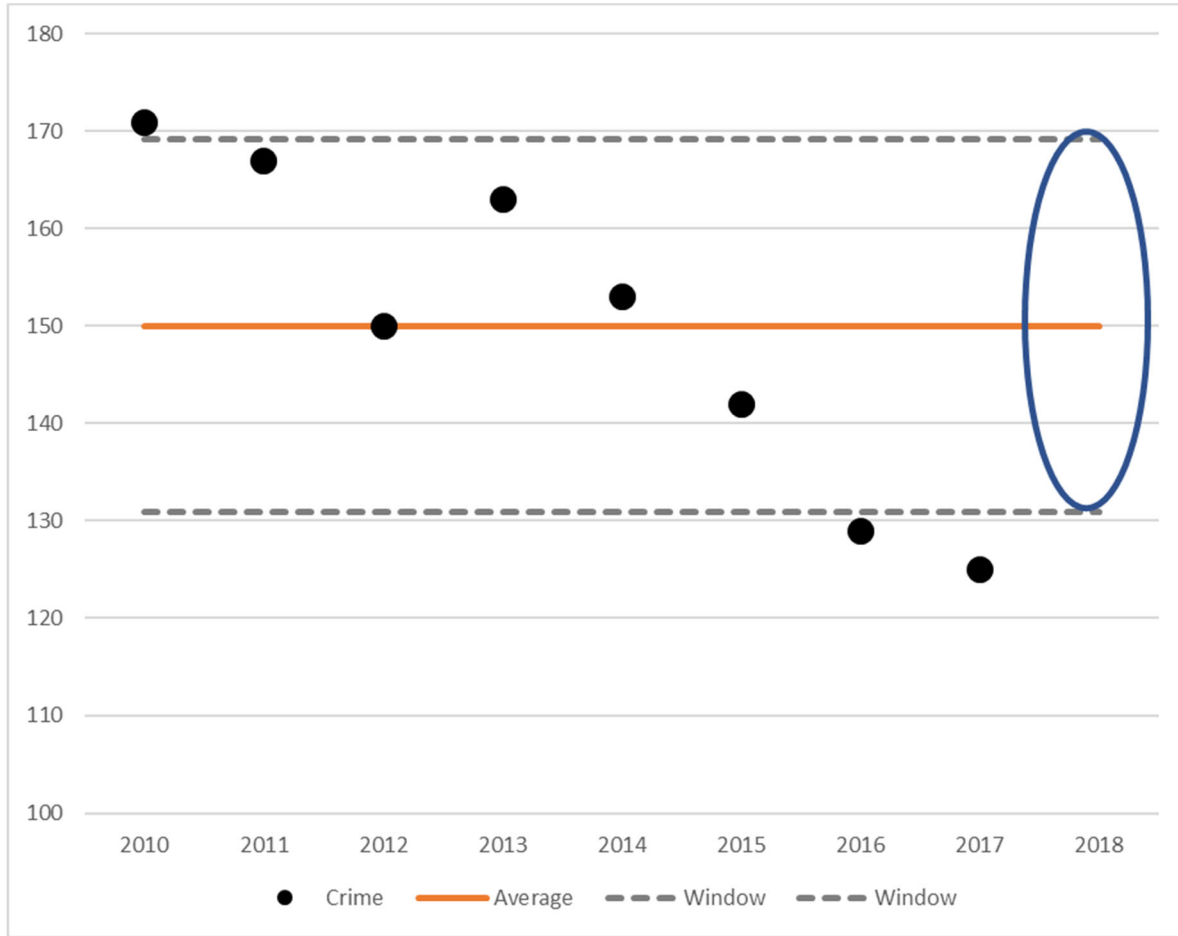


Figure 3: When the crime shows an increasing or decreasing trend, the previous method of prediction does not work.

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.

To create prediction windows when a past trend is evident (either up or down), I used basic linear regression analysis. While 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.

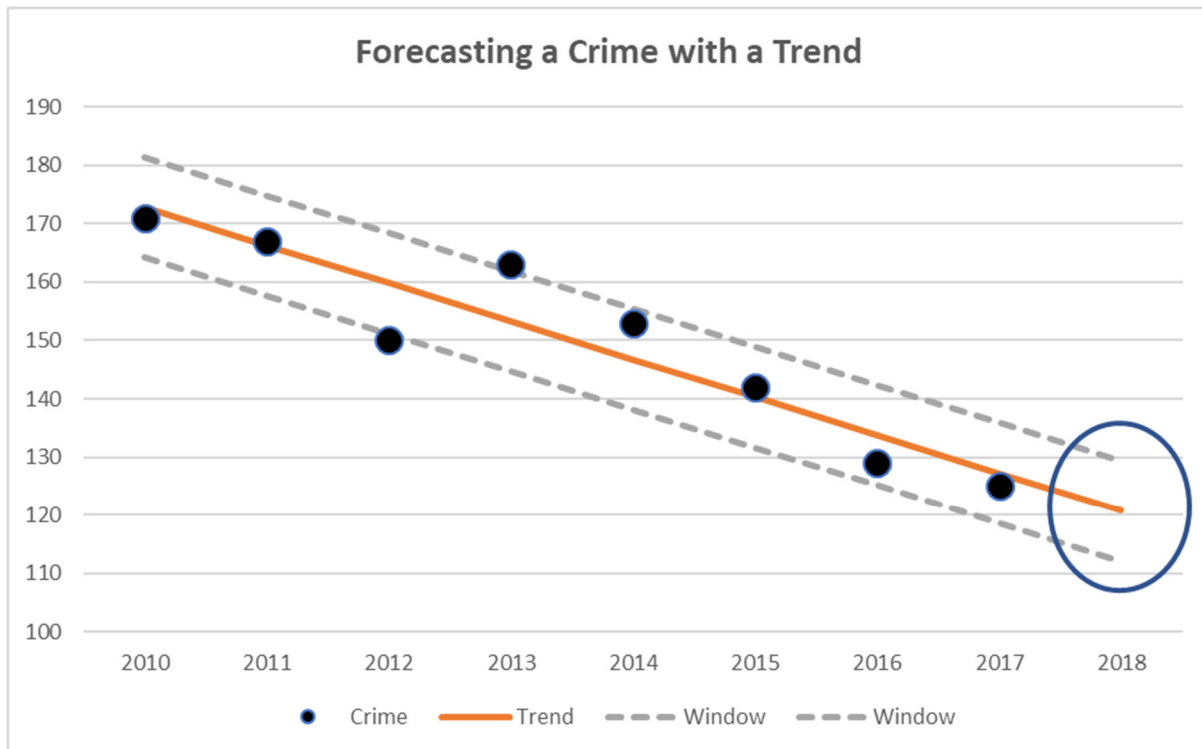


Figure 4: Trends require an alternate method of prediction that take into consideration the trendline and the normal variance around the trendline.

Thus, while most statistics offered in this report contain a “window” of predicted activity for the September–December 2018 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 2018 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 Springfield, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	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 (2010–2017 for most agencies, 2013–2017 for Springfield and the total) prior to MGM, only for the September–December period each year.
- **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 2018 figure to fall, with 85% confidence. The more erratic and unpredictable the past data, the wider this window will be.
- **Actual 2018.** The actual number of that crime observed between 1 September 2018 and 31 December 2018
- **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 2018 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 relationship

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 relationship 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. Since casinos draw a large number of people to an area, and since 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 relationship 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 majority of casino patrons are from outside the local community.
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 relationship.
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 relationship.

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 relationship 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 relationship. 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 since 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 relationship. 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 relationship 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 relationship 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 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 TriTech/IMC records management system, which makes it difficult to calculate precise crime statistics. All of the participating agencies use this system.

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 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.

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 "natural 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/TriTech 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/TriTech 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. While this seems a valuable shortcut, in truth there is a poor relationship 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. In the baseline report issued last year, I noted the over-use of both “All Other” crime and the “Other Theft” categories for many of the communities, with comparably (unrealistically) low volumes for specific theft categories like thefts from vehicles, thefts from buildings, and thefts from persons.

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 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 currently serves as vice president of membership for the IACA. 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–present).

Christopher is an internationally-recognized expert in police data systems and police data analysis. He currently trains, consults, and provides 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

Both 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. The casino opened 24 August, so statistics for August are low and are not included at all when comparisons to crime or calls for service in the rest of the city must be made.

Incidents at MGM Springfield reported by the Gaming Enforcement Unit

The following statistics were compiled by the Gaming Enforcement Unit from September to December of 2018. 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 relationship 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, August–December 2018

Crime Type	Aug	Sep	Oct	Nov	Dec	Total	Arrests
Assaults		6	10	14	9	39	38
Assistance to security	80	260	205	195	266	1006	
Assistance to other agency	10	16	25	20	31	102	
Firearms offenses	2	1	4			7	6
Fugitive from justice	2	3		1		6	5
Gaming violations	2	12	18	8	4	44	31
Theft, fraud, embezzlement	7	12	16	17	11	63	38
Counterfeiting		14	3	3	3	23	
Drug investigations	6	7	5	14	8	40	25
Robbery		1		3		4	3
Sexual assault		1	2	1		4	4
Minors in casino	18	23	12	9	21	83	
Intoxicated persons	18	29	34	29	32	142	
Suspicious persons	13	14	15	27	33	102	
Medical	16	17	12	15	26	86	
Total ejections	13	77	79	89	54	312	
Total arrests	8	35	27	29	16	115	

Crime Type	Aug	Sep	Oct	Nov	Dec	Total	Arrests
Total criminal summonses	3	23	20	15	9	70	

Incidents at MGM Springfield reported to the Springfield Police Department

Crimes, August–December 2018

Crime Type	August	September	October	November	December	Total
Sexual assault	0	0	0	1	1	2
Robbery	0	1	0	0	0	1
Aggravated assault	0	0	2	1	1	4
Simple assault	1	6	7	8	7	29
Threats	0	1	3	2	0	6
Thefts from persons	0	0	0	1	0	1
Thefts from buildings	0	5	1	1	4	11
Thefts from vehicles	0	0	1	0	0	1
Other theft	0	1	0	1	0	2
Fraud/con games	0	2	0	1	1	4
Credit card fraud	0	1	0	2	0	3
Identity theft	0	0	0	0	1	1
Vandalism	0	0	3	1	2	6
Drug offenses	1	2	1	1	0	5
Weapon violations	1	0	0	0	0	1
Disorderly conduct	2	10	10	8	2	32
Family offenses	1	0	0	0	0	1
Trespassing	0	1	2	3	2	8

Calls for service, August–December 2018

Call Type	August	September	October	November	December	Total
Administrative	0	0	0	1	1	2
Alarm	0	0	1	0	0	1
All other	6	17	12	10	9	54
Animal complaint	0	2	0	0	0	2
Assault*	0	0	0	4	4	8
Assist other agency	1	4	7	2	3	17
Auto theft*	0	2	0	0	0	2
Burglary*	0	0	0	0	1	1
Crime enforcement	13	104	149	174	211	651
Disabled vehicle	0	0	1	0	0	1
Disorderly conduct	0	8	8	9	2	27
Domestic dispute	0	1	1	0	3	5
Fire	0	1	1	0	1	3
General service	1	5	5	2	4	17
Medical	3	8	6	3	4	24

Call Type	August	September	October	November	December	Total
Other theft	1	3	2	2	4	12
Overdose	0	0	1	0	1	2
Psychological	0	1	0	0	5	6
Robbery*	0	1	0	0	1	2
Service of papers	0	0	1	0	0	1
Suspicious activity	2	2	4	6	3	17
Thefts from vehicles*	0	0	1	0	0	1
Traffic collision	4	3	1	3	6	17
Traffic enforcement	1	2	0	2	0	5
Trespassing*	0	0	0	0	1	1
Vandalism*	0	0	0	0	1	1
Vehicle stop	0	1	2	4	0	7
Warrant service	0	2	1	2	5	10
Weapons violations	0	0	1	0	0	1
Well-being check	1	0	0	2	2	5

*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 impact 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 impact of the casino on the *surrounding community*, but if we want to answer the literal impact 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–December 2018

Category	Number at Casino	Total Springfield Number	% New Caused by Casino
Violent crime offenses	41	2,152	+1.9%
Property crime offenses	29	2,543	+1.1%
Total crime offenses	156	8,154	+1.9%
Calls for service	870	79,700	+1.1%

In this sense, MGM Springfield has contributed very little to Springfield's "bottom line." That said, in the four months since it opened, it has become the single address in the 11-community area with the highest number of crimes and calls for service. It's highest on the list if we consider State Police statistics and second-highest (after the Holyoke Mall) if we consider municipal police statistics.

Reported crime at top locations, September–December 2018

Agency	Top Offense Location	Violent Crimes	Property Crimes	Total Crimes	Calls for Service
State Police	MGM Springfield	47	86	224	1751

Holyoke	Holyoke Mall	15	143	219	261
Springfield	MGM Springfield	41	28	155	870
West Springfield	Riverdale Shops	4	60	85	155
West Springfield	Big E	3	28	63	106
Springfield	Union Station	11	18	53	1165
Northampton	Walmart	0	36	50	104
Springfield	Walmart	14	17	44	252
Holyoke	Holyoke Medical Center	4	4	40	92
Springfield	CVS, 600 State St	8	19	39	203
Springfield	Bay State Medical Center	11	6	38	242
Wilbraham	Home Depot	2	17	35	261
Northampton	Highview	6	4	32	98
West Springfield	Big Y	1	27	32	44
Holyoke	Holyoke High School	14	1	31	58
Springfield	Springfield Middle School	21	2	31	28
Agawam	Six Flags New England ²	5	18	30	14

An open question is how MGM Springfield compares to other casinos of its size and visiting population. These statistics have yet to be collected but will be presented after one year of data has been collected on the facility.

² This location was only open on selected weekends during this period.

4-Month Comparison: All agencies

This section looks at how crimes and calls for service changed in the Springfield area between the eight years before MGM Springfield and the four months 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.

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, I have used only the years 2013–2017 to determine past trends and the predictive window for that agency’s crime. Since Springfield’s total makes up so much of the region total, I also used only those years to calculate the regional trend as well. For other agencies, I used the full 2010–2017 data series.

At the time of this version, because of technology issues, I was unable to collect any post-MGM data from the Chicopee Police Department and I was unable to collect post-MGM collision data from the Holyoke Police Department. These agencies are thus not factored into the relevant area totals.

Summary of all communities’ activity

The 10 contributing communities (temporarily minus Chicopee) saw expected volumes of overall violent, property, and total crime, continuing the downward trends of the last decade. In total crimes, the region came in lower than its average all year, and when it comes to the surrounding community, the opening of MGM didn’t even cause a detectable tic in total crime.

This does not mean that there are not low-volume patterns within all this data, however. The tables below show that simple assaults, thefts from vehicles, extortion, bad checks, and trespassing all came in higher than their expected values, as did gunshot calls (fortunately, there’s a non-threatening explanation for that one) and crashes involving parked vehicles. Among this data, perhaps more easily seen in the analysis of individual communities, I find two trends that I believe are likely linked to MGM Springfield:

1. An increase in thefts from vehicles (as well as “other thefts” in some communities in residential areas at nighttime).
2. An increase in collisions on some roadways that feed traffic to MGM, although this increase was not as high as expected and did not affect every community.

There is a third, vexing problem present in the data, with an uncertain MGM relationship:

3. An increase in domestic violence in Agawam, Ludlow, West Springfield, and Wilbraham (East Longmeadow had an increase in simple assaults, but they don’t seem to be domestic).

See below for a full analysis of these trends and other increases in the area.

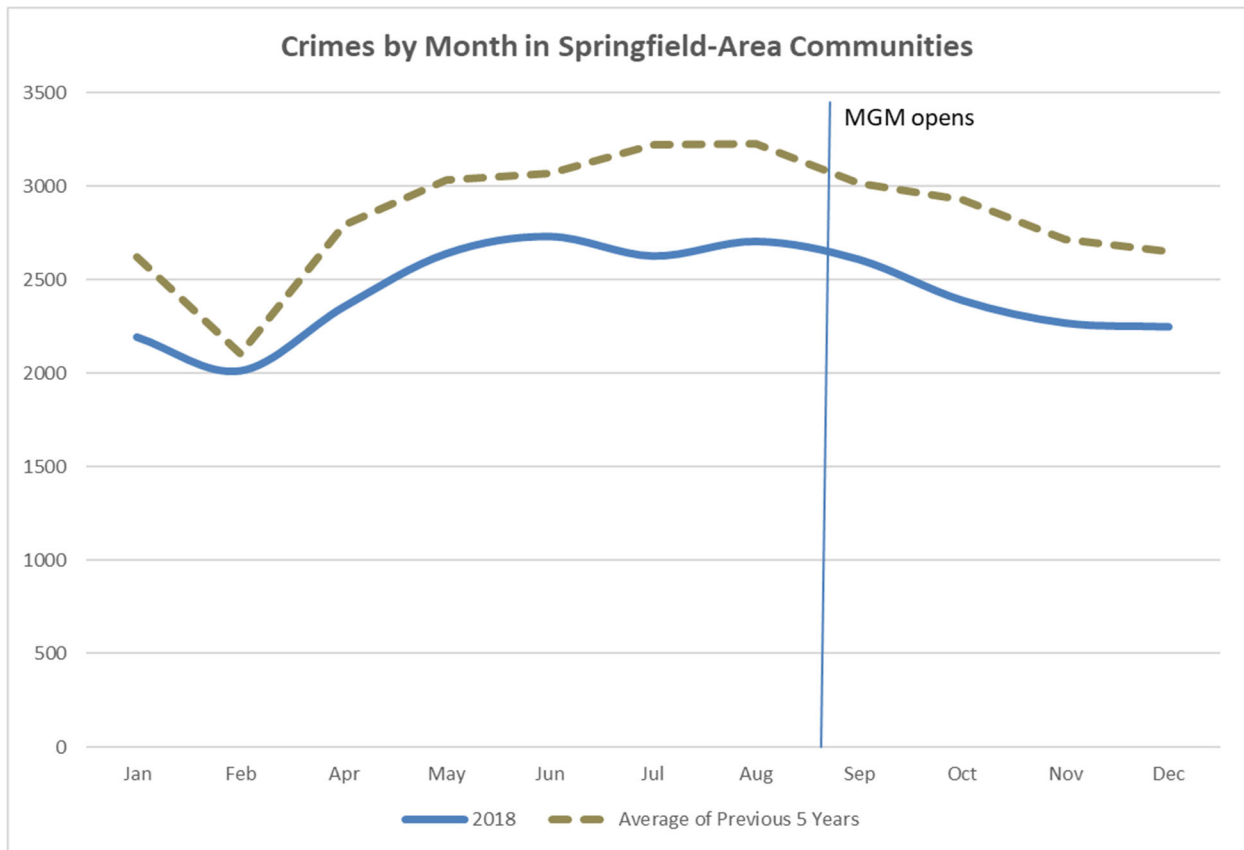


Figure 6: The opening of MGM Springfield is not detectable in the total crime trend for the region, although there are smaller increases in some individual crimes.

Incidents reported to region, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	7	0	C	4–10	5	Expected
Sexual Assault	132	-7	T	84–134	142	High
Kidnapping	29	-2	C	20–38	30	Expected
Robbery	274	-24	T	127–303	217	Expected
Aggravated Assault	557	0	C	523–591	565	Expected
Simple Assault	1780	-19	T	1667–1792	1737	Expected
Threats	928	-10	C	867–989	832	Low
Arson	22	-4	T	0–42	10	Expected
Burglary	1022	-156	T	544–704	676	Expected
Theft from Persons	27	-2	T	6–33	27	Expected
Purse-Snatching	13	-1	C	6–20	22	High
Shoplifting	527	-2	C	499–555	538	Expected
Theft from Building	464	-22	C	348–580	366	Expected
Theft from Machine	4	2	T	3–16	7	Expected
Theft from Vehicle	520	-35	T	362–484	483	Expected
Theft of MV Parts	115	24	T	72–298	117	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Other Theft	1664	-381	T	0-1356	961	Expected
Auto Theft	360	-11	T	290-410	244	Low
Forgery	117	-4	C	97-137	103	Expected
Fraud	231	12	T	238-268	295	High
Credit Card Fraud	100	16	T	106-181	123	Expected
Identity Theft	203	-6	C	161-245	170	Expected
Employee Theft	21	4	T	15-48	18	Expected
Extortion	7	1	T	0-16	19	High
Stolen Property	97	-7	T	49-105	92	Expected
Vandalism	1501	-62	T	1257-1452	1305	Expected
Drugs	481	-38	T	242-516	422	Expected
Statutory Rape	18	1	C	10-26	13	Expected
Pornography	19	3	T	14-35	33	Expected
Prostitution	15	-3	T	0-34	2	Expected
Weapons	179	16	T	191-245	229	Expected
Bad Checks	25	-5	T	0-23	23	Expected
Disorderly	245	-17	T	74-334	203	Expected
Drunk Driving	164	-5	C	138-190	148	Expected
Drunkenness	83	-12	T	20-83	64	Expected
Family Offenses	79	29	T	56-243	157	Expected
Liquor Laws	59	-1	C	45-73	54	Expected
Trespassing	162	5	C	121-203	214	High
Violent Total	3707	-62	T	3246-3867	3528	Expected
Property Total	7012	-635	T	4620-6167	5576	Expected
Total	12248	-723	T	9661-11129	10666	Expected

Sexual assault

Only Springfield experienced a significant increase in sexual assaults, but the increase was high enough to affect the statistics for the entire area. See the discussion of the crime under Springfield's numbers.

Purse Snatching

A review of sample reports suggests that many incidents coded by "purse snatching" are really just regular purse thefts that should have properly been coded as thefts from persons or vehicles (see the glossary for the distinctions), but nonetheless a couple of patterns can be seen among the incidents. Chicopee (which otherwise did not have a significant increase) reported three incidents at the Chicopee Marketplace in September and October. West Springfield showed a pattern along Riverdale Street, covered in that agency's section.

Extortion

This crime is so rare that a single agency's statistics—Springfield's, in this case—caused a bump for the region. See Springfield's profile for more about this odd trend.

Fraud/Con Games

Only West Springfield reported uniquely high numbers in this crime category, but that was enough to affect the area total as well. See the West Springfield agency analysis for more.

Bad checks

This rarely-reported crime (most businesses handle the problem through civil actions) had been decreasing in the region for years, from a high of 40 in 2010 (September–December) to a low of 15 in 2017. The 2018 total isn't particularly high compared the norm, but it represents the reversal of a near-decade trend in the area. The primary contributors to the increase were Northampton (7) and Agawam (5), but otherwise no patterns can be seen among the scattered incidents. The incident type has a plausible relationship with the presence of a casino in the area, but there are no known connections with specific offenders.

Trespassing

A statistical oddity. No individual agency showed higher-than-expected totals for this crime, but the agencies as a whole did. The bulk of the increase comes from Springfield, at residences specifically, which is about all we can tell without more information from the Springfield Police.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	185	22	T	192–345	307	Expected
Disabled Vehicle	829	4	C	725–933	983	High
Disorderly	7485	105	T	7280–8714	7151	Low
Domestic Dispute	3688	46	T	3628–4120	3872	Expected
General Service	6083	-255	T	3703–6233	5811	Expected
Gunshots	344	-13	T	206–358	366	High
Hunting	15	-1	T	4–19	17	Expected
Liquor	143	-1	C	108–178	102	Low
Lost Property	226	0	C	195–257	188	Low
Medical	7344	226	T	7339–9002	8874	Expected
Psychological	714	195	T	1220–1776	1445	Expected
Suspicious Activity	6075	8	C	5681–6469	5900	Expected
Traffic Collision	5684	118	T	5178–7032	6546	Expected
Traffic Complaint	1403	51	T	1349–1854	1671	Expected
Vagrancy	128	7	T	120–204	126	Expected

Disabled Vehicles

Unexpected volumes of disabled vehicles were reported by Chicopee and Northampton and mirrored in State Police statistics for Route 90 and Route 91. There is a logical relationship between a facility like MGM, extra traffic to the area, and consequent calls for disabled vehicles. Neither of the communities with increases showed concentrations on a particular street or a particular time period, as you might expect if the increase had been caused by an individual road condition (e.g., a bad pothole) or weather condition. I am thus tempted to designate this increase “likely”

related to MGM even though it appeared only in two communities. By the next report, we should know more about this particular trend.

Gunshots

Chicopee, Holyoke, Springfield, and Wilbraham track this call type. The increase is entirely in Springfield and seems to be related to an expansion of the ShotSpotter detection system rather than a true increase in gunshots. See the discussion under Springfield’s agency section.

Collisions reported to region, 1 September–31 December³

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	2576	111	T	2589–3538	2661	Expected
Parked vehicle	523	20	T	551–661	571	Expected
Pedestrian	113	1	C	89–137	104	Expected
Bicyclist	46	2	C	32–60	42	Expected
Animal	67	8	T	67–131	87	Expected
Fixed object	285	17	T	316–394	325	Expected
Curb/barrier	156	6	T	170–192	170	Expected
Rollover/Jackknife	15	0	C	11–19	17	Expected
Other/Unknown	96	-6	T	46–99	74	Expected
Total	3878	158	T	3958–5178	4051	Expected

Although total crashes in the region were expected compared to the norm (with the exception of parked vehicle 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 stat routes that could plausibly feed traffic to MGM.

³ Excludes Holyoke

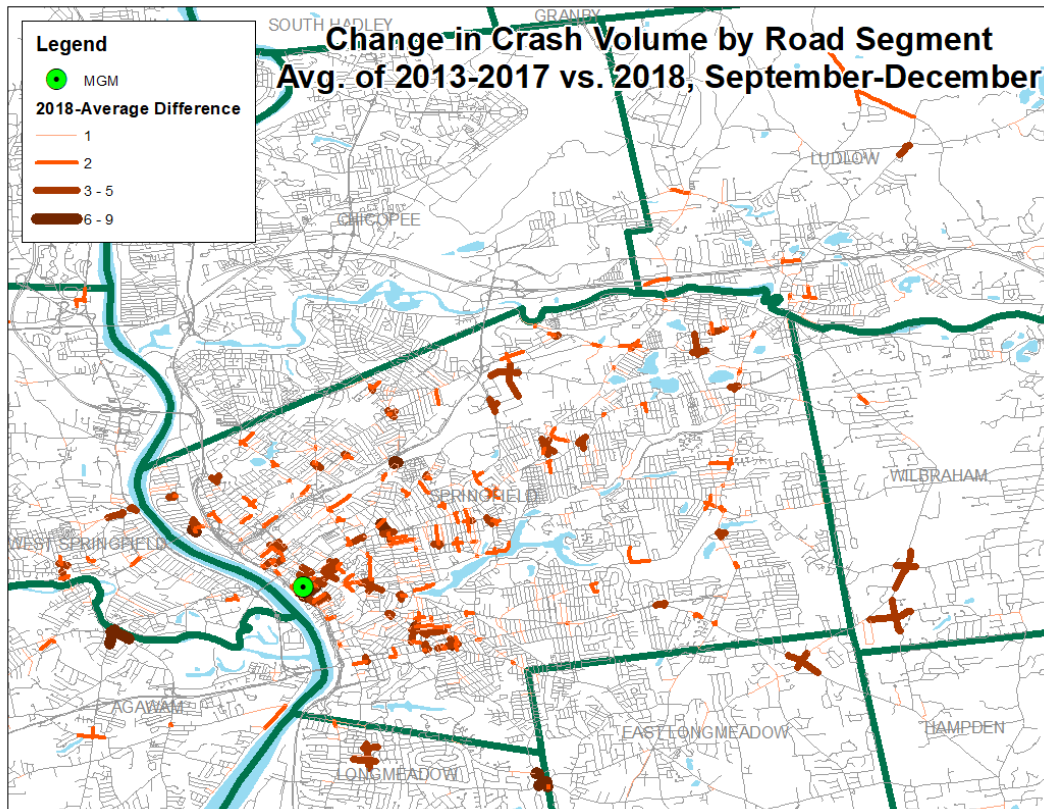


Figure 7: Changes in crash volume per street segment.

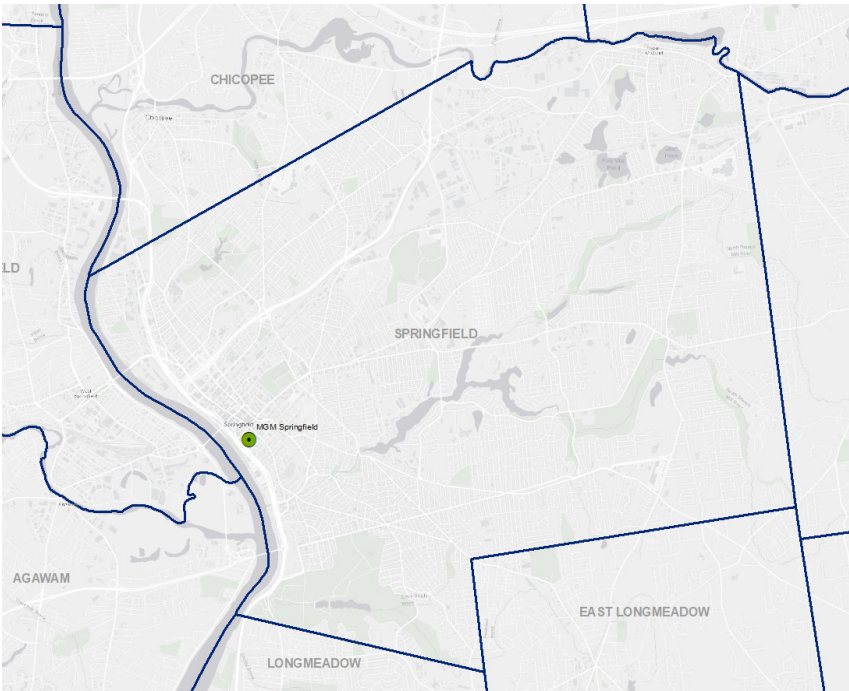
Summary of crimes in each community, 1 September–31 December

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	H	E	E	E	E	E	E	E	E	E	E	H
Kidnapping	H	E	E	E	E	E	E	H	E	E	E	E
Robbery	E	E	E	E	E	L	E	E	E	E	E	E
Aggravated Assault	E	E	H	E	E	E	E	E	L	E	E	E
Simple Assault	E	H	L	H	E	E	E	H	L	H	H	H
Threats	E	E	E	E	E	E	E	E	E	E	H	E
Arson	E	E	E	E	E	E	E	E	E	E	E	E
Burglary	E	E	E	E	L	E	E	E	E	E	E	E
Theft from Persons	E	E	E	E	E	E	E	E	E	E	E	E
Purse-Snatching	E	E	E	E	E	E	E	E	E	H	E	E
Shoplifting	E	L	E	E	E	E	E	E	E	E	H	E
Theft from Building	E	E	L	L	E	E	E	L	E	E	E	E
Theft from Machine	E	E	E	E	E	E	E	E	E	E	E	E
Theft from Vehicle	H	H	L	H	E	E	H	E	E	E	E	E
Theft of MV Parts	E	E	E	E	E	E	E	E	E	E	E	E
Other Theft	E	E	E	H	E	L	H	E	L	E	E	E
Auto Theft	E	L	L	E	E	E	E	E	E	E	E	L
Forgery	E	L	L	E	E	E	E	E	H	L	E	E

Category	SP	AG	CH	EL	HA	HO	LO	LU	NH	WS	WI	ALL
Fraud/Con Games	E	E	E	E	E	E	E	E	E	H	E	E
Credit Card Fraud	E	E	E	E	E	E	E	E	E	E	E	E
Identity Theft	E	E	E	E	H	E	E	E	L	H	E	E
Employee Theft	E	E	E	E	E	E	E	L	E	L	E	E
Extortion	H	E	E	E	E	E	E	E	E	E	E	H
Stolen Property	E	L	E	E	E	E	E	E	E	H	E	E
Vandalism	E	E	H	E	E	E	L	E	E	E	E	E
Drugs	E	E	E	E	E	E	E	E	E	E	E	E
Statutory Rape	E	E	E	E	E	E	E	E	E	E	E	E
Pornography	E	H	E	H	E	E	E	E	E	H	E	E
Prostitution	E	E	E	E	E	E	E	E	E	E	E	E
Weapons	E	E	E	E	E	H	E	E	E	E	E	E
Bad Checks	E	E	L	E	E	E	E	L	H	E	E	H
Disorderly	E	E	E	E	E	E	E	L	L	E	E	E
Drunk Driving	E	E	H	E	E	E	E	E	E	E	E	L
Drunkenness	E	E	E	E	E	E	E	E	E	E	E	E
Family Offenses	E	E	E	E	E	E	E	E	E	E	E	E
Liquor Laws	E	E	H	E	E	E	E	E	E	E	E	L
Trespassing	E	E	H	E	E	E	E	E	E	E	E	H
Violent Total	E	H	L	H	E	E	E	H	L	E	H	E
Property Total	E	E	E	E	L	L	E	L	E	E	E	E
Total	H	E	E	E	E	E	E	E	L	E	E	E

4-month comparison: Springfield



Population (est. 2016):
154,758

Area: 33.1 square miles

Police officers: 504

**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, impoverished, 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 hot spot 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 5, we see the impact of MGM on the total crime trend for the year is barely perceptible, even when we include crimes at MGM itself.

The city did show a higher-than-expected value for total crimes in the last four months of 2018. It wasn't an increase from the average (the total was actually down by about 13%) but rather a failure to maintain the same rate of decrease that the city had been experiencing between 2013 and 2017. Contributing to the increase were higher-than-expected totals in sexual assault, kidnapping, thefts from vehicles, and extortion.

We had hoped that the extra legitimate traffic in Springfield's downtown, plus the extra law enforcement presence, might actually help decrease crime. That may still happen, but it hasn't happened yet—at least as reflected in citywide statistics—and not a single category was lower-than-expected for 2018.

Calls for service tended low in the last four months of 2018, with the exception of gunshots (which has a non-scary explanation). Crashes were also unexpected normal for the city as a whole, though an analysis of specific street segments shows that MGM may be influencing crashes in its immediate area.

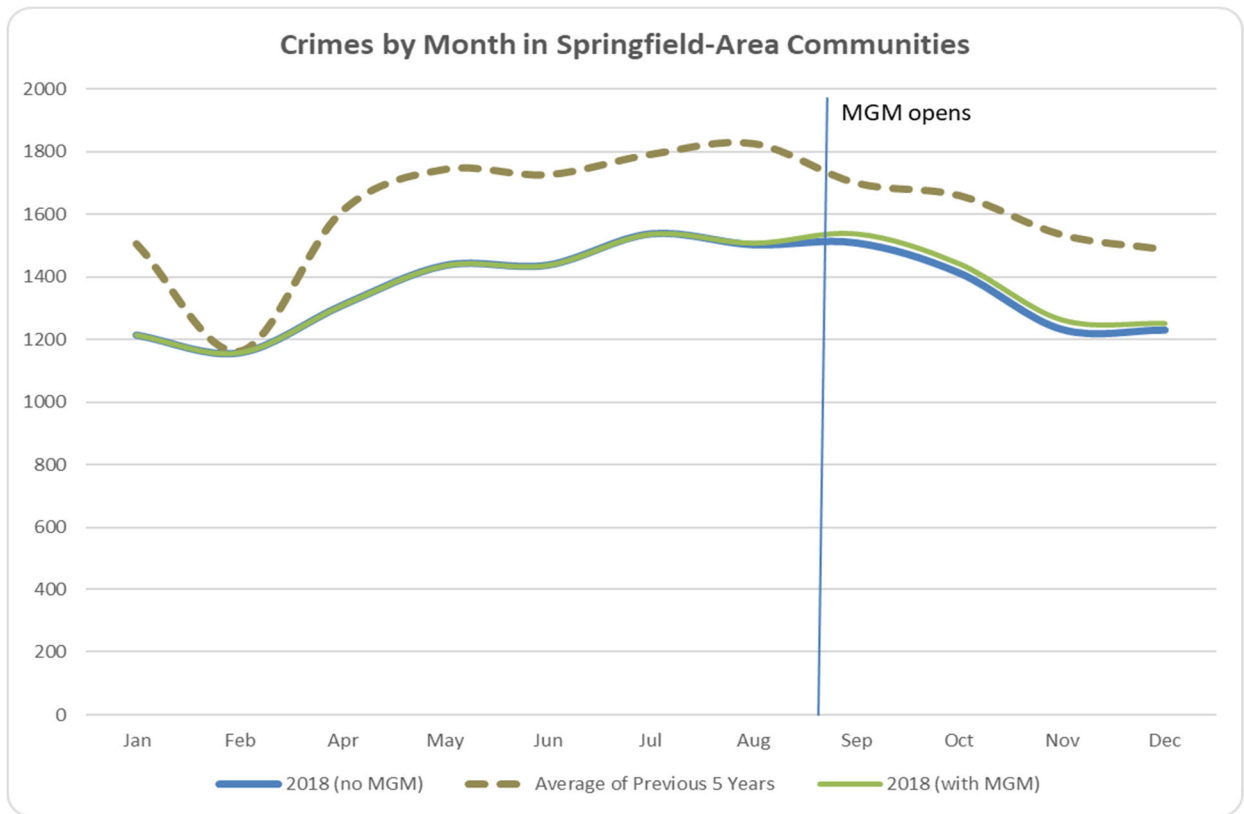


Figure 8: The opening of MGM is barely reflected in overall crime statistics, even in Springfield alone.

Crimes reported to Springfield, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	5	0	C	3–7	5	Expected
Sexual Assault	65	-7	T	16–66	77	High
Kidnapping	18	-1	C	16–20	22	High
Robbery	192	-20	T	83–197	157	Expected
Aggravated Assault	306	-15	T	195–322	317	Expected
Simple Assault	1031	-26	T	861–1055	1006	Expected
Threats	600	-8	T	507–672	527	Expected
Arson	12	-2	C	2–22	5	Expected
Burglary	543	-111	T	153–363	302	Expected
Theft from Persons	20	-3	T	2–20	20	Expected
Purse-Snatching	3	-1	T	0–5	4	Expected
Shoplifting	104	16	T	99–192	133	Expected
Theft from Building	236	-14	C	114–358	236	Expected
Theft from Machine	4	2	T	4–16	7	Expected
Theft from Vehicle	288	-34	T	197–264	289	High
Theft of MV Parts	69	30	T	72–231	95	Expected
Other Theft	765	-328	T	0–514	266	Expected
Auto Theft	219	-15	T	128–254	130	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Forgery	54	-1	C	45-63	56	Expected
Fraud/Con Games	81	6	T	63-131	88	Expected
Credit Card Fraud	50	18	T	68-123	87	Expected
Identity Theft	108	-19	T	0-144	66	Expected
Employee Theft	9	3	T	4-28	13	Expected
Extortion	5	1	T	0-9	15	High
Stolen Property	36	-3	T	6-45	37	Expected
Vandalism	737	-21	T	578-802	658	Expected
Drugs	195	2	C	151-239	166	Expected
Statutory Rape	4	-1	C	0-9	0	Expected
Pornography	7	2	T	5-18	13	Expected
Prostitution	13	-3	T	0-33	2	Expected
Weapons	121	11	T	141-159	147	Expected
Bad Checks	10	-2	T	0-15	7	Expected
Disorderly	109	-12	T	11-144	92	Expected
Drunk Driving	17	-2	C	9-25	11	Expected
Drunkenness	1	0	C	0-2	0	Expected
Family Offenses	65	34	T	35-263	155	Expected
Liquor Laws	14	1	C	8-20	13	Expected
Trespassing	99	17	T	80-195	156	Expected
Violent Total	2216	-77	T	1751-2262	2111	Expected
Property Total	3340	-476	T	1574-2580	2507	Expected
Total	6211	-505	T	4469-5254	5380	High

Sexual assault

Springfield's total of 79 sexual assaults in the last four months of 2018 is not a record historically—the period from 2010 to 2015 has a couple of years above 70 and a high of 93 in 2011. But it is an increase from the historical trend, which had the crime decrease to 48 and 49 respectively in 2016 and 2017. Most of the increase, accounting for 57% of the total cases, was at residences, suggesting a relationship between the offender and victim in most events. There are a few incidents immediately adjacent to the casino, including one at a pizzeria on Main Street and one on the street on State Street, that I would ask the Springfield Police to investigate for a possible connection.

Kidnapping

Kidnapping can involve any number of scenarios in which one person abducts another or confines another. While 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 4 months of 2018, a year that reached a five-year high for that offense. The Springfield Crime Analysis Unit has investigated each of the cases and finds no plausible link to MGM.

Thefts from vehicles

After declining almost every year since 2011 and hitting an all-time low in 2017, thefts from vehicles reversed their trend in 2018 and ended well above the expected value given the previous trend. The maps below show that the

block immediately around MGM Springfield is responsible for a small part of the increase, with cars burglarized on the streets at all hours and days. But this pattern was a small contributor to the increasing, amounting to only about 10 incidents.

The Metro Center in general had a decrease in thefts, however, as did the surrounding residential neighborhood. The bulk of the increase came from residences southeast of MGM, centered around the intersection known as The X. These crimes are usually at night, often with multiple driveways targeted in a single night, with thieves looking in particular for purses and wallets. (There was also an increase in the Liberty Heights neighborhood with many of the same factors.) This is a pattern, discussed earlier in this report, that Springfield is sharing with Longmeadow and East Longmeadow.

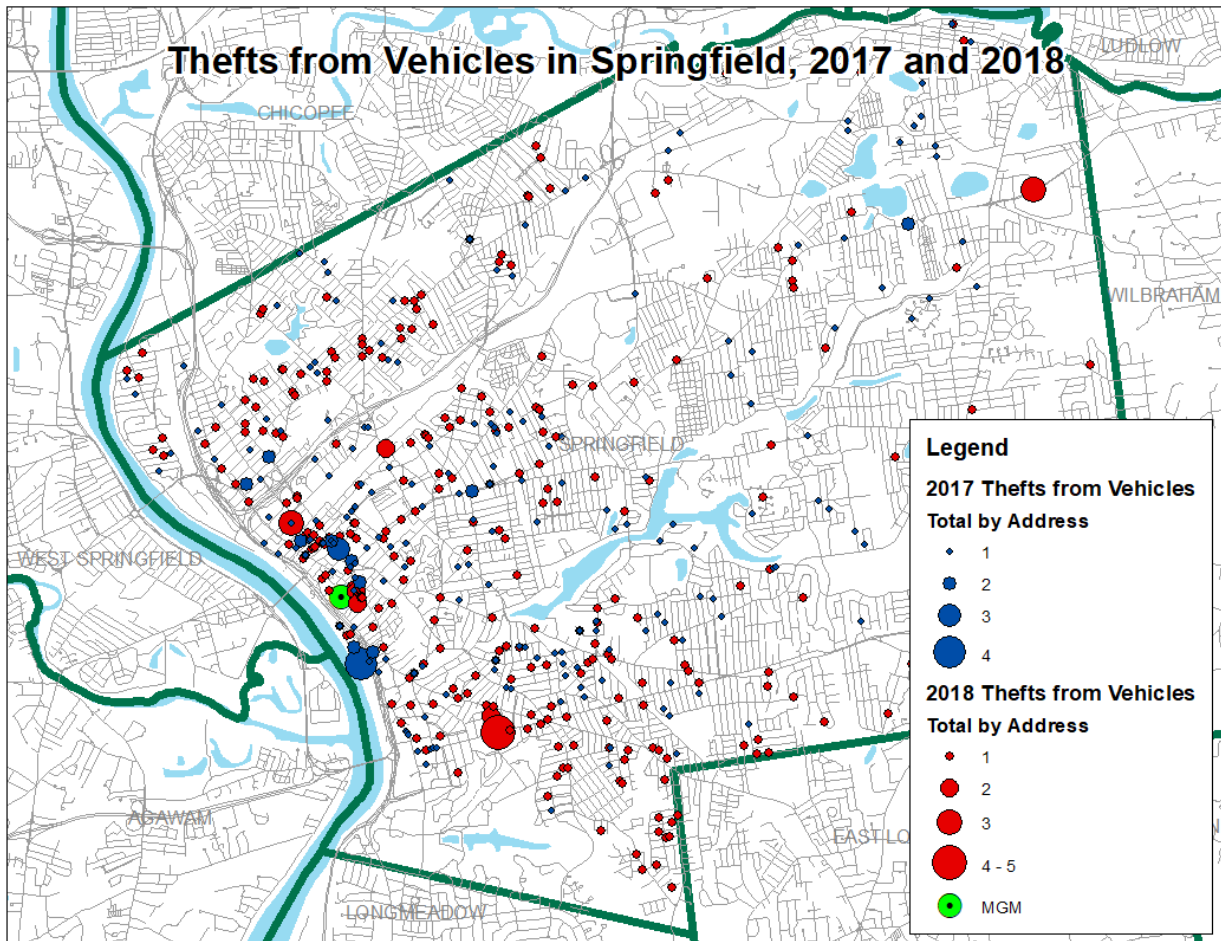


Figure 9: A comparison of thefts from vehicles in 2017 and 2018 shows increased hits in residential neighborhoods northwest and southeast of MGM.

Extortion

Extortion is a rare crime in any community. Also known as "blackmail," it describes attempts to coerce money from victims through means other than violence or threats of violence; for instance, by threatening to release embarrassing information. Springfield's 2018 total is a high for the agency. 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.

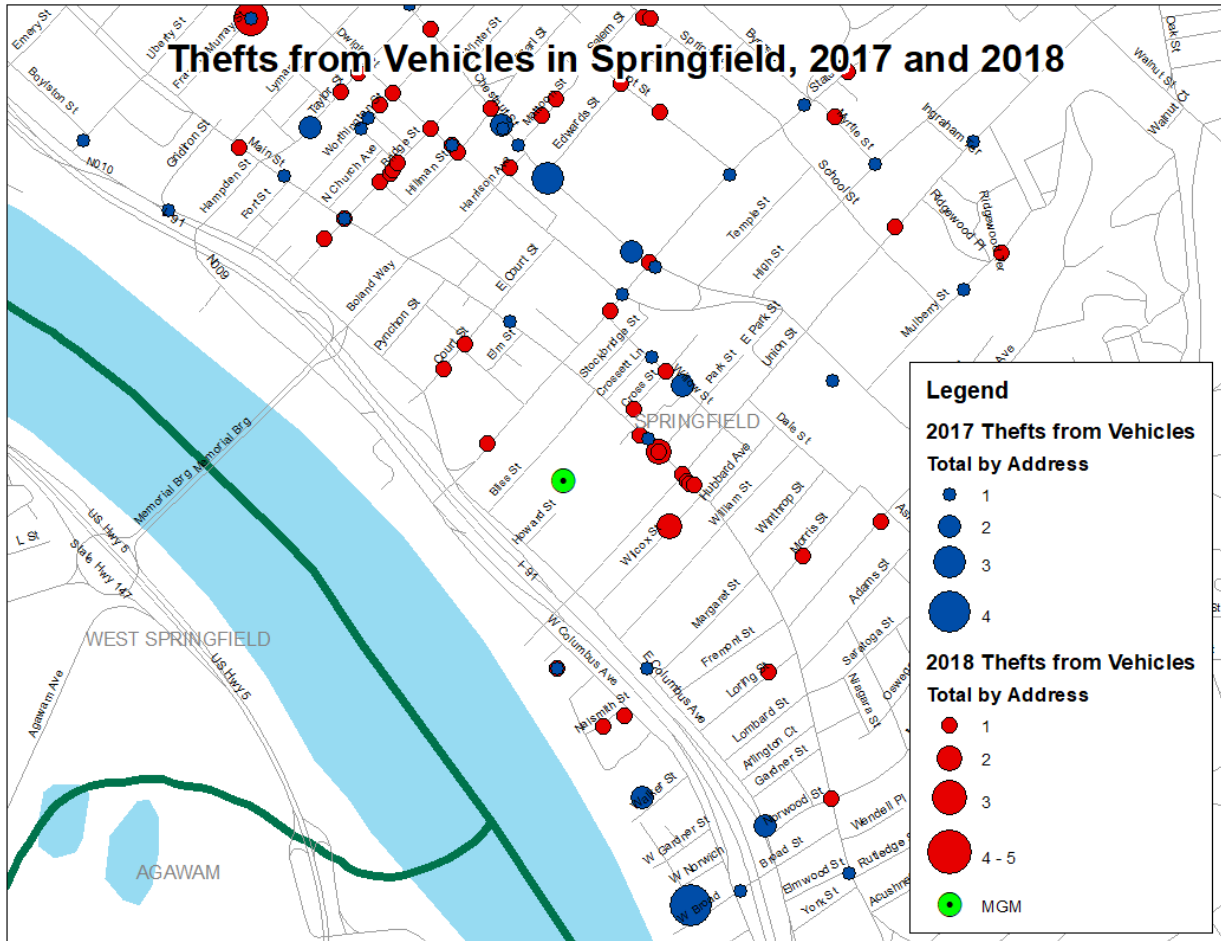


Figure 10: A look at thefts from vehicles immediately around MGM shows an increase on the adjacent streets, but in general, thefts were lower in the Metro Center area.

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

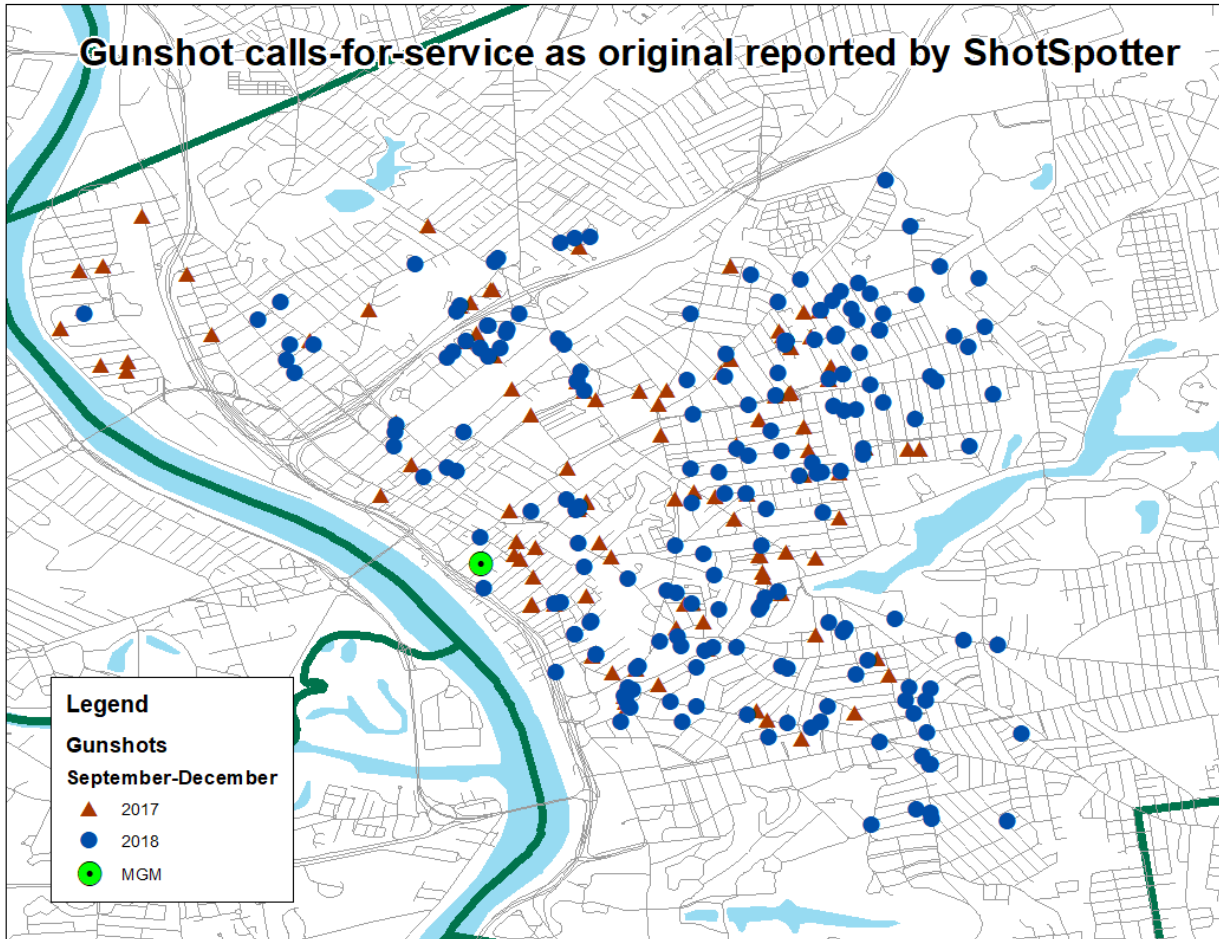
Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	157	36	T	183–312	244	Expected
Disabled Vehicle	227	19	T	190–347	300	Expected
Disturbance	3843	348	T	4358–5333	4052	Low
Domestic Dispute	3204	80	T	3126–3754	3218	Expected
Gunshots	276	-17	T	143–287	316	High
Medical	3408	112	T	2969–4229	4140	Expected
Psychological	862	230	T	986–1978	1218	Expected
Suspicious Activity	2516	136	T	2219–3609	2566	Expected
Traffic Collision	2308	216	T	2599–3111	2809	Expected

Gunshots

The only call for service type to increase in Springfield is arguably the most serious. The 2018 gunshot total was the highest since 2013 and it reversed a generally decreasing trend over the five years. Fortunately, the number of

gunshot reports does not seem to have translated to more people shot, as aggravated assault and homicide were both in their expected ranges. (Keep in mind, too, that the category has a lot of “false positives,” with other sounds mistaken by either callers or automated systems as gunshots.) Gunshots were actually up for the entire year, not just the last four months, and the increase seems to be tied to an expansion of the city’s ShotSpotter installation—an automated system for detecting gunshots—a plan announced in late 2017⁴. If we remove from consideration those shots reported by ShotSpotter, the total becomes 102 against an expected range of 103–141, which is low for the time period.

The map below shows 2017 and 2018 gunshot calls reported by ShotSpotter, and it clearly shows extra detections in the expanded areas to the east and southeast. In summary, not only is the increase in gunshot calls not related to MGM Springfield, it is more of an increase in detection than an increase in the actual number of shots fired.



Collisions reported to Springfield, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	1112	92	T	1216–1475	1318	Expected
Parked vehicle	199	13	T	200–257	249	Expected
Pedestrian	65	1	C	55–75	71	Expected

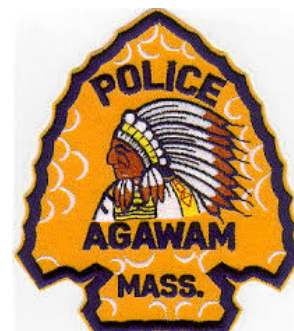
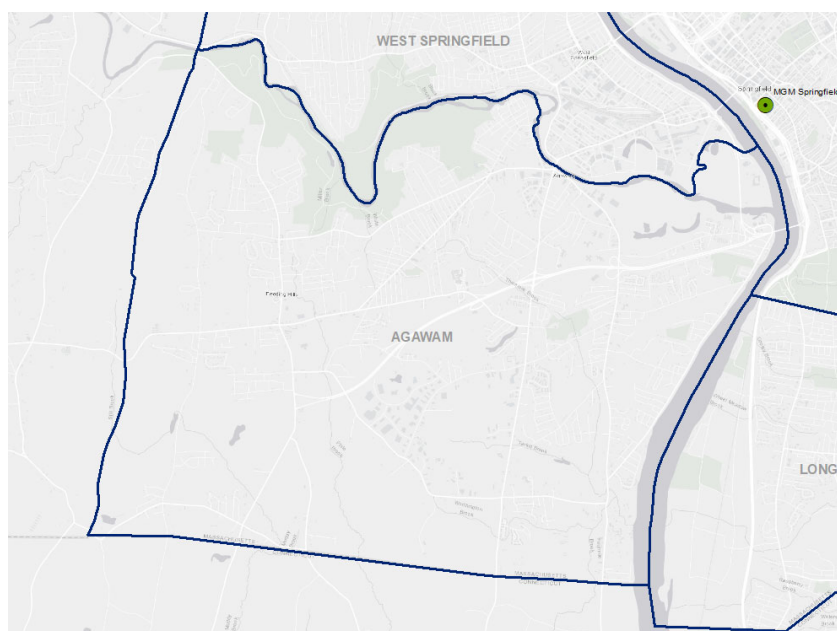
⁴ Crombleholme, H. (2017, September 10). Springfield expanding ShotSpotter system. WWLP.com Retrieved from https://www.wwlp.com/news/crime/springfield-expanding-shotspotter-system_20180314102839488/1043337010

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Bicyclist	26	1	C	20-32	26	Expected
Animal	5	-1	C	2-8	3	Expected
Fixed object	129	3	C	106-152	147	Expected
Curb/barrier	62	5	T	50-96	70	Expected
Rollover/Jackknife	4	-1	T	0-6	2	Expected
Other/Unknown	25	-3	T	0-37	14	Expected
Total	1624	110	T	1740-2055	1900	Expected

A facility expected to draw several million visitors per year was naturally expected to have a traffic impact on the surrounding community. In Springfield's case, the local roads seem to have borne the extra burden well. While total crashes did increase by about 100 over 2017, the total was consistent with the trend that Springfield was on whether the casino was built or not.

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 impact on the number of accidents in its immediate vicinity while still not appreciably increasing overall accident totals. We'll do a more thorough crash analysis of the area when more data is available in the next report.

4-month comparison: Agawam



Population (est. 2016): 28,718

Area: 24.2 square miles

Police officers: 47

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. Increases in thefts from vehicles and pornography probably have nothing to do with the casino. 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 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	4	0	C	1-7	4	Expected
Kidnapping	0	0	T	0-1	0	Expected
Robbery	3	0	T	2-7	3	Expected
Aggravated Assault	15	3	T	16-37	24	Expected
Simple Assault	41	5	T	46-72	78	High
Threats	12	2	T	9-28	24	Expected
Arson	1	0	C	0-2	0	Expected
Burglary	47	6	T	33-118	52	Expected
Theft from Persons	0	0	T	0-1	1	Expected
Purse-Snatching	1	0	C	0-2	2	Expected
Shoplifting	6	2	T	9-20	7	Low
Theft from Building	10	2	T	10-26	12	Expected
Theft from Machine	0	0	C	0-0	0	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Theft from Vehicle	3	0	T	0-3	5	High
Theft of MV Parts	1	0	C	0-3	2	Expected
Other Theft	58	6	T	61-107	73	Expected
Auto Theft	11	1	T	8-20	6	Low
Forgery	5	1	T	6-15	4	Low
Fraud/Con Games	13	2	T	13-32	27	Expected
Credit Card Fraud	3	0	C	1-5	2	Expected
Identity Theft	8	2	T	12-22	19	Expected
Employee Theft	1	0	T	0-3	0	Expected
Extortion	1	0	T	0-3	2	Expected
Stolen Property	4	1	T	6-15	5	Low
Vandalism	36	3	T	24-71	65	Expected
Drugs	13	-2	T	0-20	10	Expected
Statutory Rape	3	0	C	0-6	1	Expected
Pornography	1	0	T	0-3	5	High
Prostitution	0	0	T	0-0	0	Expected
Weapons	3	0	C	1-5	2	Expected
Bad Checks	2	0	T	0-5	5	Expected
Disorderly	12	-2	T	0-12	9	Expected
Drunk Driving	12	-1	T	0-18	11	Expected
Drunkenness	2	1	T	0-10	0	Expected
Family Offenses	8	1	C	0-31	0	Expected
Liquor Laws	4	0	C	0-8	1	Expected
Trespassing	5	0	C	2-8	5	Expected
Violent Total	76	9	T	89-130	133	High
Property Total	210	28	T	236-415	284	Expected
Total	404	27	T	218-728	466	Expected

Simple Assault

Simple assaults have been on an upward trend in Agawam, starting at 18 (for this for-month period) in 2010 and gaining about 5 per year to reach highs of over 50 in 2016 and 2017. But in 2018, it shot up to 78. Incidents are evenly split between domestic and non-domestic assaults (based on crime code). About a third of the increase is localized at Six Flags. The location rarely reports more than one assault per quarter, but it had seven in the last four months of 2018.

The increase in domestic assaults is particularly troubling, and it matches trends seen in the other communities. In Agawam's case, the trend did not begin until September of 2018, and from there scattered throughout the residential community. As with the other communities seeing this increase, we will have to conduct a full analysis of the police narratives to understand the trend should it continue into the next reporting period.

Thefts from vehicles

Agawam rarely reports this crime, so the September–December 2018 total of 5 is still unusually high for the town—the highest, in fact, since 2011. The increase is the result of a one-day spree at Six Flags on Saturday, 8 September

2018, in which three cars were burglarized between 12:30 and 17:30 and stole the owners' wallets and purses. Such sprees have been seen in the past at the same location, in pairs or triplets, but this was the first in several years during these months. There may be a tangential MGM relationship if MGM can be shown to have increased attendance at Six Flags.

Pornography

An unusual high of 5 pornography offenses were reported by Agawam in the last four months of 2018. Among them are three charges of "Distributing Obscene Matter" and one each of "Distributing Obscene Matter to a Minor" and "Possession of Child Pornography." Among the five cases, only two offenders are listed: a 34-year-old West Springfield man and a 30-year-old Agawam man. The Agawam Police will have to report if they wish on any more details regarding this trend.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Disabled Vehicle	108	5	T	78–165	164	Expected
Disorderly	132	2	C	108–156	138	Expected
Domestic Dispute	104	-5	T	37–124	122	Expected
General Service	354	19	T	310–518	556	High
Hunting	8	0	C	5–11	4	Low
Lost Property	5	0	C	2–8	16	High
Medical	550	29	T	487–829	727	Expected
Psychological	5	1	T	5–14	7	Expected
Suspicious Activity	432	13	T	370–593	502	Expected
Traffic Collision	282	6	C	235–329	346	High
Traffic Complaint	110	2	T	93–142	133	Expected

General service

Calls in this category increased heavily in October and December of 2018, but in general the category was high for the entire year and not just the last four months. The police headquarters accounted for about one-third of the increase, and almost the entirety of the increase was concentrated in the early morning hours between 00:00 and 04:00. Unfortunately, there is little else within the data to explain this trend.

Traffic collisions

Both calls for service and reported traffic collisions were well above their norms in Agawam during this period, and in this case the increase did not begin until the final third of the year. North and South Westfield Streets, Springfield Street, and Route 5 north accounted for most of the call increase, all of which could indicate heavier traffic heading through town to the casino.

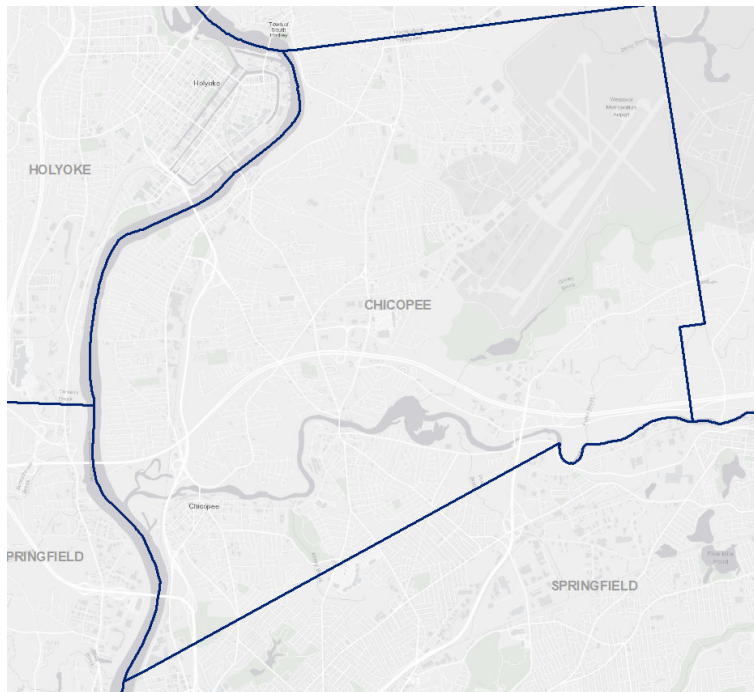
Collisions reported to Agawam, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	132	2	C	111–153	178	High

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Parked vehicle	16	0	C	11-21	41	High
Pedestrian	3	0	C	1-5	2	Expected
Bicyclist	1	0	T	0-2	0	Expected
Animal	3	0	C	0-6	4	Expected
Fixed object	19	1	C	11-27	35	High
Curb/barrier	10	1	T	6-18	17	Expected
Rollover/Jackknife	2	0	T	0-3	1	Expected
Other/Unknown	5	0	C	2-8	10	High
Total	190	4	T	152-242	288	High

Like nearby West Springfield, Agawam had a higher-than-expected collision total for the last four months of 2018, with the brunt of the increase seen on Main Street, Route 5 south, South Westfield Street, and Springfield Street.

4-month comparison: Chicopee



Population (est. 2016): 55,991

Area: 23.9 square miles

Police officers: 132

City center distance from MGM:
5.52 miles

Chicopee was unable to participate in this four-month analysis because of a problem extracting data from the RMS and CAD systems. The blank tables have been left here in case of a last-minute ability to participate. The technical issues should be cleared up by the 8-month report.

Crimes reported to Chicopee, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	T	0–2	0	Expected
Sexual Assault	19	-1	T	6–24	18	Expected
Kidnapping	5	0	C	1–9	4	Expected
Robbery	23	1	C	17–29	26	Expected
Aggravated Assault	52	-1	C	45–59	60	High
Simple Assault	228	-1	C	217–239	192	Low
Threats	95	1	C	82–108	86	Expected
Arson	0	0	T	0–0	0	Expected
Burglary	146	-10	T	37–170	127	Expected
Theft from Persons	2	0	C	0–4	4	Expected
Purse-Snatching	3	0	T	1–8	7	Expected
Shoplifting	51	-2	T	24–62	49	Expected
Theft from Building	59	-2	T	30–76	16	Low
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	44	1	C	36–52	27	Low

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Theft of MV Parts	42	-5	T	5-43	10	Expected
Other Theft	104	1	C	85-123	120	Expected
Auto Theft	39	1	C	32-46	22	Low
Forgery	15	0	C	12-18	9	Low
Fraud/Con Games	50	-3	T	13-58	52	Expected
Credit Card Fraud	7	-1	T	0-8	3	Expected
Identity Theft	28	3	T	30-54	36	Expected
Employee Theft	4	0	C	2-6	2	Expected
Extortion	0	0	C	0-0	0	Expected
Stolen Property	10	-1	T	0-10	6	Expected
Vandalism	161	-8	T	104-145	155	High
Drugs	30	-1	C	19-41	32	Expected
Statutory Rape	3	0	C	1-5	4	Expected
Pornography	3	0	C	0-6	3	Expected
Prostitution	0	0	C	0-1	0	Expected
Weapons	12	0	C	6-18	18	Expected
Bad Checks	4	0	C	2-6	1	Low
Disorderly	28	-3	T	1-27	23	Expected
Drunk Driving	16	-1	T	2-16	29	High
Drunkenness	31	-5	T	0-26	26	Expected
Family Offenses	0	0	C	0-1	0	Expected
Liquor Laws	5	0	C	2-8	19	High
Trespassing	17	-2	T	0-17	20	High
Violent Total	423	-1	C	393-453	386	Low
Property Total	626	46	T	554-1109	645	Expected
Total	1281	-38	T	1010-1354	1206	Expected

Aggravated Assault

Chicopee was the only community to report an increase in aggravated assault during this period, and it wasn't a huge one, exceeding its expected range only by a single incident. There is a mild increase at residences, suggesting domestic assault, but the bulk of the increase (for location type) is found in the "Other/Unknown" category, which does not help. Similarly unhelpful is that the only weapon to significantly increase was also "other." A review of offenders shows that most of them come from Chicopee itself, and most of the incidents seem to involve adult males as both victims and offenders. A lack of similar increases in other communities, as well as a lack of a logical tie between this crime and a casino, makes an MGM relationship unlikely, but we will conduct further analysis if the trend persists into the next reporting period.

Vandalism

Chicopee's increase in vandalism has affected mostly residential properties in November and December. Groupings of incidents by day suggests that the increase is a result of several one-night sprees. There are also a couple of individual addresses that each reported 3 or 4 incidents. With no other community reporting a similar increase, and on logical connection between this crime type and a casino, it is likely unrelated to MGM.

Drunk Driving

Chicopee saw a spike in drunk driving arrests in October, although with no particular day or time concentrations. 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 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.

Liquor Laws

As with drunk driving, Chicopee was the only agency to report a significant increase in this offense type. All but one of the offenses involved open containers of liquor in stopped vehicles, suggesting again an increase in traffic enforcement in the fall of 2018 rather than a real increase in consumption of alcohol.

Trespassing

The increase is tied entirely to two addresses: the Wal-Mart 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 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	16	0	C	9–23	25	High
Disabled Vehicle	122	2	C	100–144	148	High
Disturbance	999	-14	T	827–1111	732	Low
General Service	692	14	C	559–825	702	Expected
Medical	511	30	T	442–812	673	Expected
Overdose	21	8	T	27–79	53	Expected
Suspicious Activity	563	8	C	479–647	604	Expected
Traffic Collision	744	14	T	663–933	818	Expected
Traffic Complaint	510	38	T	470–855	670	Expected

Abandoned Vehicle

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

Disabled Vehicle

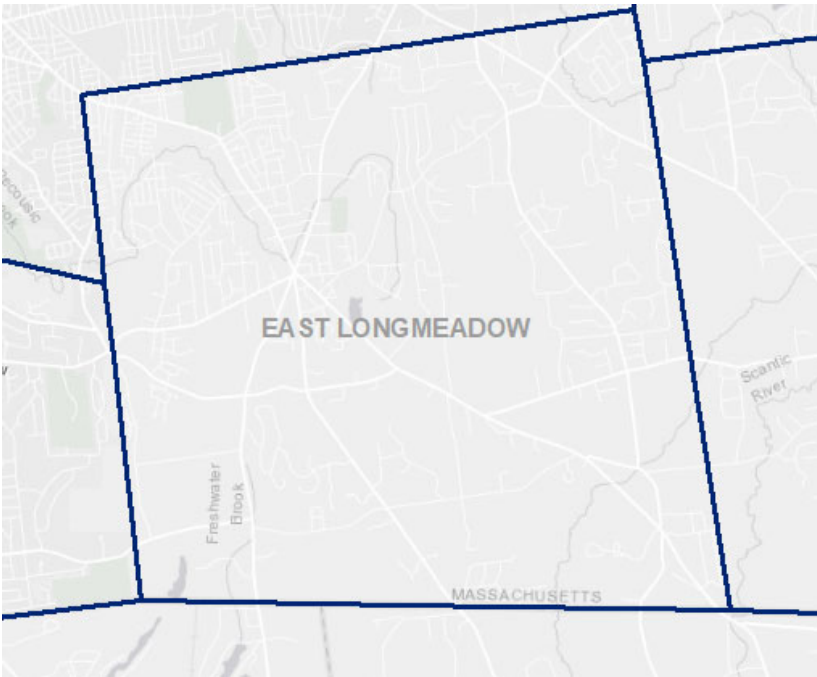
Chicopee saw a significant increase in disabled motor vehicle calls from September to November. It is spread equally across days, times, and regions of the city. Of the other communities, only Northampton reported a similar increase in this call, but it still may be related to extra traffic heading through the community to MGM.

Collisions reported to Chicopee, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	361	13	T	340–492	398	Expected
Parked vehicle	106	1	C	91–121	127	High
Pedestrian	13	-1	T	3–15	13	Expected
Bicyclist	6	0	C	4–8	7	Expected
Animal	2	0	T	1–6	5	Expected
Fixed object	37	2	T	28–66	39	Expected
Curb/barrier	26	0	C	20–32	37	High
Rollover/Jackknife	3	1	T	4–9	5	Expected
Other/Unknown	15	0	T	10–17	11	Expected
Total	569	17	T	527–741	642	Expected

Collisions have been increasing steadily in Chicopee since 2012. The 2018 figure was within the expected window given the existing trend, but parked vehicle collisions and curb/barrier collisions were a bit higher than their individual trends would have predicted. The increase, more oddly, is entirely confined to November, though not on any particular day or at any particular location. There is evidence that MGM has led to increased collisions on some area roads, and thus may be behind Chicopee's specific patterns. By the next report, we should know if the trend is holding.

4-month comparison: East Longmeadow



Population (est. 2016): 16,267

Area: 13.0 square miles

Police officers: 26

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. The agency also reported an increase in simple assaults during the last four months of 2018. Most calls for service and traffic collisions, on the other hand, came in at expected volumes.

Crimes reported to East Longmeadow, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	3	0	C	0-7	1	Expected
Kidnapping	0	0	T	0-1	0	Expected
Robbery	1	0	C	0-2	2	Expected
Aggravated Assault	5	-1	T	0-7	7	Expected
Simple Assault	22	-2	T	0-25	33	High
Threats	19	-4	T	0-14	11	Expected
Arson	0	0	C	0-1	0	Expected
Burglary	17	-2	T	0-21	6	Expected
Theft from Persons	0	0	C	0-1	0	Expected
Purse-Snatching	1	0	T	0-1	1	Expected
Shoplifting	17	-1	C	10-24	17	Expected
Theft from Building	10	0	C	6-14	3	Low
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	16	-3	T	0-19	25	High
Theft of MV Parts	3	-1	T	0-3	1	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Other Theft	38	-2	T	6-47	53	High
Auto Theft	4	0	C	1-7	5	Expected
Forgery	2	0	C	0-4	1	Expected
Fraud/Con Games	12	0	C	8-16	11	Expected
Credit Card Fraud	3	0	C	1-5	2	Expected
Identity Theft	2	0	C	0-4	1	Expected
Employee Theft	0	0	T	0-2	1	Expected
Extortion	0	0	C	0-1	0	Expected
Stolen Property	3	0	C	0-7	0	Expected
Vandalism	36	-6	T	0-29	21	Expected
Drugs	12	-1	T	0-19	7	Expected
Statutory Rape	1	0	C	0-3	3	Expected
Pornography	1	0	C	0-2	3	High
Prostitution	0	0	C	0-0	0	Expected
Weapons	2	0	C	0-4	2	Expected
Bad Checks	2	0	C	0-5	0	Expected
Disorderly	5	-1	T	0-6	4	Expected
Drunk Driving	10	1	T	5-25	8	Expected
Drunkenness	2	0	C	0-4	1	Expected
Family Offenses	0	0	C	0-1	1	Expected
Liquor Laws	3	0	C	0-6	0	Expected
Trespassing	6	0	C	1-11	3	Expected
Violent Total	50	-7	T	0-44	54	High
Property Total	165	-16	T	36-154	148	Expected
Total	222	-18	T	79-250	234	Expected

Simple assault

Like several other communities, East Longmeadow saw an increase in simple assaults during this period, which also had the effect of increasing its total violent crime. Unlike the other communities, East Longmeadow's increase is not obviously composed of domestic assaults. The charge codes do not indicate family violence, and the location type codes where the assaults increased include grocery stores, offices, schools, and streets, but not residences. A full narrative analysis will be necessary to determine the cause of the increase here.

Thefts from vehicles and other theft

Since MGM Springfield opened, East Longmeadow has seen 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, although there's a high "other" total in the property type data. Among the incidents are several one-night sprees in which multiple residences are hit on the same evening.

The two crimes together amount to about 46 cases in the last four months of 2018, accounting for most of the increase in these two crime categories. The incidents are concentrated on the north half of town near the

Springfield border, particularly the northwest corner off Route 83. The agency shares this pattern with East Longmeadow and Springfield itself.

This pattern is not new to the agency: the northern half of the town has consistently reported 30–50 such residential thefts per year. But the crime had been decreasing steadily, and 2018 brought a reversal and intensification of this longstanding issue. While we do not yet have confirmation that any specific offender was motivated by a desire for gambling funds, the totality of the circumstantial evidence (multiple agencies involved, clear spatial relationship to the casino, a logical connection to the crime) makes me think that the pattern has, at least in part, a likely MGM Springfield relationship.

Pornography

Three pornography incidents recorded by East Longmeadow in the final months of 2018 represent an unusual spike for the community. One of the incidents involves three men arrested for enticing and sharing sexually explicit images with an 11-year-old boy on social media apps. The other two cases seem to involve children sharing nude images with each other. None of the cases point to any MGM influence.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Disabled Vehicle	15	0	C	8–22	0	Low
Disturbance	10	1	C	4–16	0	Low
Domestic Dispute	25	7	T	23–80	72	Expected
General Service	415	-19	T	237–381	567	High
Liquor	1	0	C	0–4	0	Expected
Lost Property	11	-1	T	1–10	0	Low
Medical	582	20	T	577–720	763	High
Psychological	2	1	T	2–12	0	Low
Suspicious Activity	332	-5	T	264–371	275	Expected
Traffic Collision	188	-1	C	167–209	169	Expected
Traffic Complaint	1	0	C	0–3	0	Expected

General service

East Longmeadow’s large increase in this category is made up of about 150 extra “assistance” calls spread all over town at all hours and days.

Medical

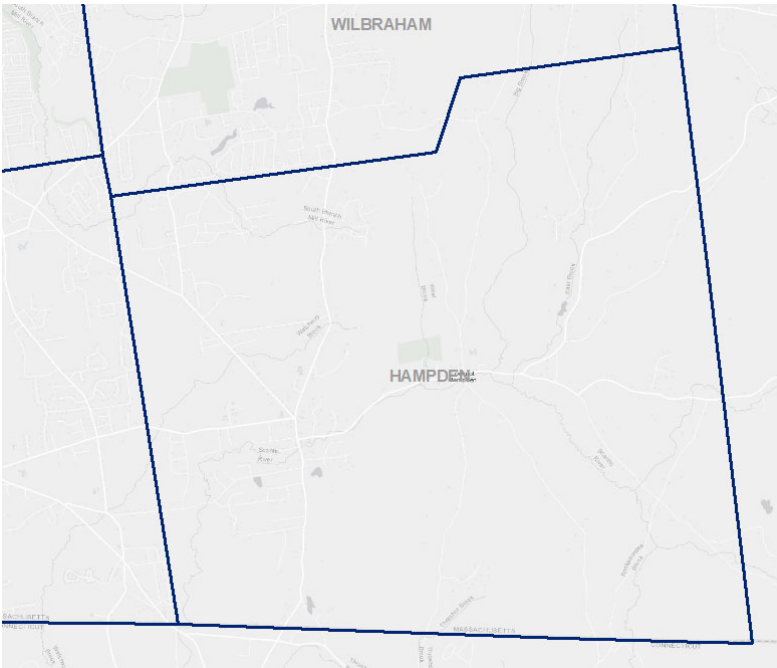
Like the general service calls, an increase in medical calls is indicative of more people in a community in general. East Longmeadow’s medical aid total has increased steadily since 2010 but outpaced even expectations based on the trend to hit a 9-year high in 2018, with a particular acceleration in the final four months. The increase is tied to five particular addresses, two of them retirement homes, two of them nursing and rehab facilities, and one a public housing address. The increase thus seems to be related more to an aging residential community than a visiting one.

Collisions reported to East Longmeadow, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	116	0	C	105–127	99	Low
Parked vehicle	26	-1	C	19–33	25	Expected
Pedestrian	3	0	C	1–5	2	Expected
Bicyclist	2	0	T	0–2	2	Expected
Animal	14	0	C	8–20	16	Expected
Fixed object	14	0	C	9–19	18	Expected
Curb/barrier	6	0	C	4–8	5	Expected
Rollover/Jackknife	1	0	C	0–2	3	High
Other/Unknown	9	-1	T	0–10	4	Expected
Total	190	-2	C	167–213	174	Expected

Collisions in East Longmeadow were on the lower end of normal for the study period. The “high” value in rollover and jackknife accidents represents a 1-crash increase over a very small normal number. If East Longmeadow is seeing extra traffic because of MGM Springfield, it is not being reflected in its collisions.

4-month comparison: Hampden



Population (est. 2016): 5,227

Area: 19.7 square miles

Police officers: 11

City center distance from MGM:
9.06 miles

The most geographically isolated of the 11 communities in this study (the town has no highways, major state routes, or PVRTA bus routes), it was always a long shot that this low-crime community would see much activity post-MGM. During the last four months of 2018, the agency saw expected volumes of violent and total crimes and set a 9-year low for property crimes. Its only significant increase was in identity theft, and that was only 1 incident above the expected value, for a total of 3. The only call for service to see a significant increase was hunting-related calls, and traffic collisions were normal in all categories.

Crimes reported to Hampden, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	0	0	C	0-0	0	Expected
Kidnapping	0	0	C	0-0	0	Expected
Robbery	0	0	C	0-1	0	Expected
Aggravated Assault	1	0	C	0-2	1	Expected
Simple Assault	3	0	C	0-6	2	Expected
Threats	2	0	T	0-3	1	Expected
Arson	0	0	C	0-0	0	Expected
Burglary	6	0	C	1-11	0	Low
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	4	-1	T	0-5	1	Expected
Theft from Machine	0	0	C	0-0	0	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Theft from Vehicle	2	0	C	0-5	2	Expected
Theft of MV Parts	0	0	C	0-0	0	Expected
Other Theft	8	0	C	1-15	2	Expected
Auto Theft	1	0	C	0-3	2	Expected
Forgery	0	0	C	0-1	0	Expected
Fraud/Con Games	1	0	C	0-2	0	Expected
Credit Card Fraud	0	0	T	0-0	0	Expected
Identity Theft	1	0	C	0-2	3	High
Employee Theft	0	0	C	0-0	0	Expected
Extortion	0	0	C	0-0	0	Expected
Stolen Property	1	0	C	0-2	0	Expected
Vandalism	10	-1	C	3-17	6	Expected
Drugs	1	0	C	0-2	0	Expected
Statutory Rape	0	0	C	0-0	0	Expected
Pornography	0	0	T	0-1	0	Expected
Prostitution	0	0	C	0-0	0	Expected
Weapons	0	0	T	0-1	0	Expected
Bad Checks	0	0	C	0-1	0	Expected
Disorderly	1	0	T	0-2	0	Expected
Drunk Driving	4	0	C	1-7	2	Expected
Drunkenness	1	0	C	0-3	1	Expected
Family Offenses	0	0	C	0-0	0	Expected
Liquor Laws	2	0	C	0-5	1	Expected
Trespassing	2	0	C	0-6	1	Expected
Violent Total	5	0	C	2-8	4	Expected
Property Total	35	-2	T	19-35	16	Low
Total	46	-4	T	22-57	25	Expected

Identity theft

The only crime to show a significant increase in 2018, Hampden's "high" of three identity thefts were reported on per month in October, November, and December, all at the front desk of the police station. There isn't enough data to determine a pattern among them, but the small number, and the lack of a regional increase make an MGM connection unlikely.

Selected calls for service reported to Hampden, 1 September-31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	1	0	C	0-2	1	Expected
Disabled Vehicle	12	-1	T	1-13	8	Expected
Disturbance	12	-1	C	5-19	8	Expected
Domestic Dispute	9	0	C	6-12	8	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
General Service	314	12	T	283-459	291	Expected
Hunting	3	-1	T	0-4	5	High
Medical	97	-1	C	78-116	112	Expected
Suspicious Activity	68	-5	T	28-70	53	Expected
Traffic Collision	30	3	T	22-62	26	Expected
Traffic Complaint	3	0	C	1-5	0	Low

Hunting

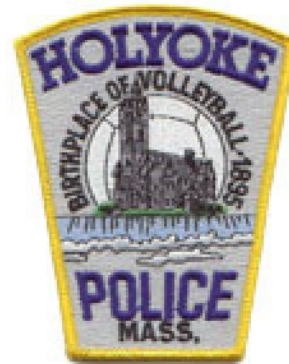
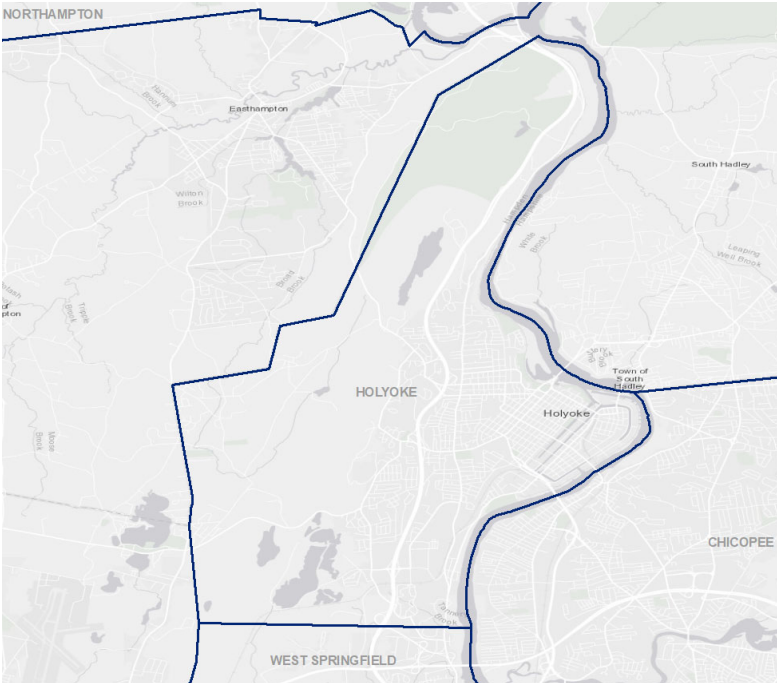
Hampden joins nearby Wilbraham in an increase in hunting-related complaints, heavily focused in December 2018. There is otherwise no time, day, or geographic concentration, nor any more hints in the CAD data about why such calls were unusually high last year. The increase was only in the last four months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

Collisions reported to Hampden, 1 September-31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	5	1	T	4-13	6	Expected
Parked vehicle	2	0	C	1-3	3	Expected
Pedestrian	0	0	C	0-0	0	Expected
Bicyclist	0	0	C	0-1	0	Expected
Animal	7	2	T	3-26	6	Expected
Fixed object	6	0	T	5-10	6	Expected
Curb/barrier	2	0	C	0-4	0	Expected
Rollover/Jackknife	0	0	C	0-1	0	Expected
Other/Unknown	2	0	C	0-2	0	Expected
Total	25	2	T	19-52	21	Expected

Hampden had no discernible increase in any collision type during the last four months of 2018. Totals for all categories were expected based on past trends, and tended toward the lower end of their ranges. And odd spike in animal collisions in 2017 did not recur.

4-month comparison: Holyoke



Population (est. 2016): 40,341

Area: 22.8 square miles

Police officers: 124

City center distance from MGM:
7.97 miles

As one of the more removed jurisdictions from MGM, Holyoke didn't seem to feel much influence from the casino, and all of its crimes except weapons violations were either expected or low for the period. (In particular, the agency reported by far the lowest property crime total in at least 9 years.) Its calls for service were also average-to-low. Unfortunately, I could not obtain collision data from the agency in time for this report, but CAD calls for traffic collisions were normal.

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 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	1	0	C	0-2	0	Expected
Sexual Assault	10	0	C	6-14	9	Expected
Kidnapping	3	0	T	0-4	2	Expected
Robbery	37	0	C	26-48	20	Low
Aggravated Assault	89	2	C	73-105	77	Expected
Simple Assault	266	-10	T	151-304	224	Expected
Threats	137	-3	C	113-161	116	Expected
Arson	4	0	C	2-6	2	Expected
Burglary	142	-10	T	58-149	77	Expected
Theft from Persons	0	0	C	0-0	0	Expected
Purse-Snatching	0	0	T	0-1	1	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Shoplifting	173	-13	T	97-145	126	Expected
Theft from Building	4	0	C	1-7	7	Expected
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	80	-4	C	51-109	51	Expected
Theft of MV Parts	5	-1	T	0-8	1	Expected
Other Theft	411	-9	C	338-484	210	Low
Auto Theft	45	-3	C	24-66	40	Expected
Forgery	14	-1	T	0-18	13	Expected
Fraud/Con Games	1	0	C	0-2	1	Expected
Credit Card Fraud	18	1	C	13-23	20	Expected
Identity Theft	0	0	C	0-0	0	Expected
Employee Theft	0	0	C	0-1	0	Expected
Extortion	1	0	C	0-3	1	Expected
Stolen Property	23	-1	C	16-30	22	Expected
Vandalism	325	-24	T	170-299	191	Expected
Drugs	158	-5	C	114-202	169	Expected
Statutory Rape	0	0	C	0-0	0	Expected
Pornography	1	0	T	0-4	3	Expected
Prostitution	1	0	C	0-3	0	Expected
Weapons	26	0	C	19-33	45	High
Bad Checks	0	0	C	0-0	2	Expected
Disorderly	63	-4	T	25-71	49	Expected
Drunk Driving	16	-2	T	0-21	16	Expected
Drunkenness	0	0	C	0-0	0	Expected
Family Offenses	0	0	C	0-1	0	Expected
Liquor Laws	2	-1	T	0-2	0	Expected
Trespassing	28	-12	T	0-15	0	Expected
Violent Total	543	-11	T	402-610	448	Expected
Property Total	1245	-66	T	854-1163	763	Low
Total	1931	-112	T	1374-1988	1495	Expected

Weapon violations

Weapons violations were Holyoke's one increase during this period. 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 relationship between the incidents and the casino. Since 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.

Selected calls for service reported to Holyoke, 1 September-31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	34	-2	T	7-42	24	Expected
Disabled Vehicle	99	1	C	83-115	92	Expected
Disorderly	1102	-22	T	912-1145	897	Low
Domestic Dispute	119	-1	C	92-146	109	Expected
General Service	461	4	C	407-515	383	Low
Gunshots	44	-2	T	21-51	44	Expected
Liquor	28	0	C	19-37	25	Expected
Lost Property	37	-2	T	16-45	23	Expected
Medical	522	40	T	537-867	528	Low
Overdose	19	6	T	18-66	49	Expected
Psychological	62	16	T	13-218	192	Expected
Suspicious Activity	425	-6	C	359-491	316	Low
Traffic Collision	697	1	C	629-765	692	Expected
Traffic Complaint	63	-2	C	41-85	41	Expected

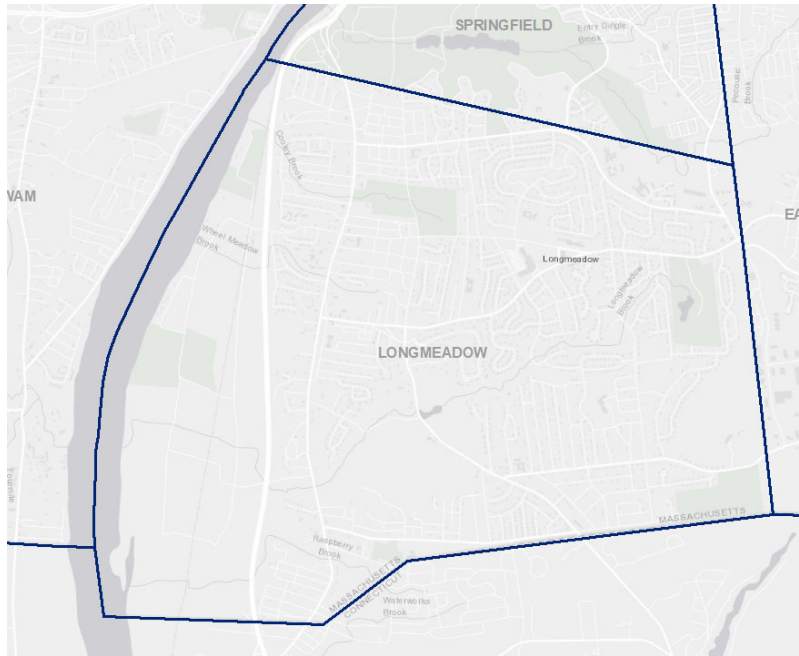
No call for service type in Holyoke exceeded its expected window for the period.

Collisions reported to Holyoke, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic						
Parked vehicle						
Pedestrian						
Bicyclist						
Animal						
Fixed object						
Curb/barrier						
Rollover/Jackknife						
Other/Unknown						
Total						

I was unable to collect collision data from Holyoke for the September–December time period because of an issue with the ODBC connection to the RMS. IMC was notified, but it is unknown if they ever repaired the issue.

4-month comparison: Longmeadow



Population (est. 2016): 15,876

Area: 9.7 square miles

Police officers: 26

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 respect to thefts from vehicles and other thefts from residences, this trend intensified in 2018, as discussed below. Longmeadow also saw increases in traffic complaints and traffic collisions, both of which may reflect increased traffic volume coming through the town on the way to MGM.

Crimes reported to Longmeadow, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	1	0	T	1-4	2	Expected
Kidnapping	0	0	C	0-0	0	Expected
Robbery	1	0	T	0-1	0	Expected
Aggravated Assault	1	0	C	0-3	2	Expected
Simple Assault	5	0	C	4-6	5	Expected
Threats	5	0	T	2-5	2	Expected
Arson	0	0	C	0-1	0	Expected
Burglary	13	0	C	7-19	13	Expected
Theft from Persons	1	0	C	0-2	0	Expected
Purse-Snatching	0	0	C	0-1	0	Expected
Shoplifting	3	0	C	0-6	5	Expected
Theft from Building	12	1	C	2-22	6	Expected
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	14	-2	T	0-17	18	High

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Theft of MV Parts	0	0	C	0-0	0	Expected
Other Theft	24	-4	T	0-18	26	High
Auto Theft	3	0	C	0-6	6	Expected
Forgery	2	0	C	0-4	0	Expected
Fraud/Con Games	8	0	C	3-13	9	Expected
Credit Card Fraud	2	0	C	0-4	1	Expected
Identity Theft	7	1	T	6-15	6	Expected
Employee Theft	1	0	T	0-1	0	Expected
Extortion	0	0	C	0-0	0	Expected
Stolen Property	1	0	C	0-2	0	Expected
Vandalism	20	-1	C	12-28	5	Low
Drugs	1	0	C	0-2	1	Expected
Statutory Rape	0	0	T	0-2	0	Expected
Pornography	0	0	C	0-1	0	Expected
Prostitution	0	0	C	0-0	0	Expected
Weapons	0	0	C	0-1	0	Expected
Bad Checks	1	0	T	0-1	0	Expected
Disorderly	1	0	C	0-2	0	Expected
Drunk Driving	7	0	C	1-13	8	Expected
Drunkenness	0	0	C	0-0	0	Expected
Family Offenses	0	0	T	0-1	0	Expected
Liquor Laws	2	0	C	0-5	0	Expected
Trespassing	1	0	C	0-2	2	Expected
Violent Total	13	0	C	11-15	11	Expected
Property Total	109	-6	T	52-116	95	Expected
Total	126	-4	C	109-143	117	Expected

Thefts from vehicles and other thefts

Since MGM Springfield opened, Longmeadow has seen 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, although there's a high "other" total in the property type data. Among the incidents are several one-night sprees in which multiple residences are hit on the same evening.

The two crimes together amount to about 35 cases in the last four months of 2018, accounting for most of the increase in these two crime categories. The incidents are concentrated on the north side of town near the Springfield border, and the agency shares this pattern with East Longmeadow and Springfield itself.

This pattern is not new to the agency: the northern third of the town has consistently reported 40-70 such residential thefts per year. But the crime had been decreasing steadily, and 2018 brought a reversal and intensification of this longstanding issue. While we do not yet have confirmation that any specific offender was motivated by a desire for gambling funds, the totality of the circumstantial evidence (multiple agencies involved, clear spatial relationship to the casino, a logical connection to the crime) makes me think that the pattern has, at least in part, a likely MGM Springfield relationship.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Disabled Vehicle	39	-2	T	16–43	29	Expected
Disturbance	44	-1	C	30–58	34	Expected
Domestic Dispute	23	0	C	18–28	20	Expected
General Service	285	6	T	263–370	240	Low
Medical	357	7	T	325–436	420	Expected
Suspicious Activity	181	-11	T	82–194	144	Expected
Traffic Collision	139	1	C	124–154	162	High
Traffic Complaint	52	0	C	43–61	62	High

Traffic collisions

The numbers show an odd phenomenon in Longmeadow: it appears that the agency must take a full collision report on all of its collisions rather than just the injury collisions and high-dollar-value collisions that the state mandates. For this reason, calls for service for collisions do not have to be analyzed separately from collision reports. See below for a description of the latter.

Traffic complaints

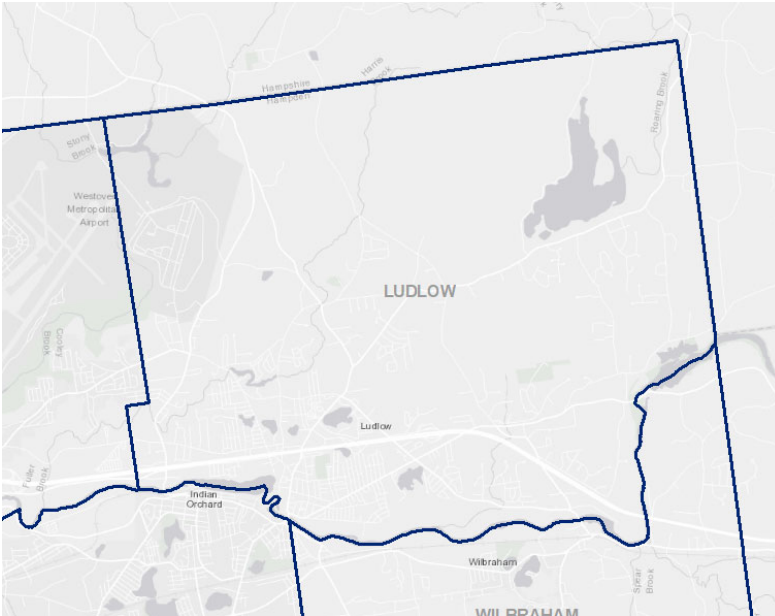
Longmeadow showed a slightly high value for erratic, improper, and annoying driving and parking behaviors, but with no particular geographic or temporal concentration. As noted in several of the other communities' profiles, this is a call type that almost inevitably increases with extra traffic in a community.

Collisions reported to Longmeadow, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	85	2	T	76–108	104	Expected
Parked vehicle	28	-1	T	13–32	30	Expected
Pedestrian	1	0	C	0–2	0	Expected
Bicyclist	1	0	C	0–2	0	Expected
Animal	9	1	T	5–24	10	Expected
Fixed object	9	0	C	4–14	8	Expected
Curb/barrier	3	0	T	0–4	7	High
Rollover/Jackknife	0	0	C	0–0	1	High
Other/Unknown	3	0	T	0–4	1	Expected
Total	138	1	C	125–151	161	High

Longmeadow showed higher-than-normal collision volume during this period, although no particular category dominated the increase. Laurel Street at Bliss Road and Converse Streets saw an increase, as did Dwight Road between Converse and Williams, both of which could logically be connected with more local traffic going to MGM, but a lack of similar increases along the same routes puts the ultimate conclusion in doubt.

4-month comparison: Ludlow



Population (est. 2016): 21,484

Area: 28.2 square miles

Police officers: 38

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 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	2	0	C	0-4	0	Expected
Kidnapping	0	0	C	0-0	2	High
Robbery	2	-1	T	0-4	0	Expected
Aggravated Assault	8	2	T	11-19	16	Expected
Simple Assault	23	1	C	14-32	47	High
Threats	13	-1	C	6-20	14	Expected
Arson	0	0	C	0-1	1	Expected
Burglary	28	-1	C	14-42	14	Expected
Theft from Persons	0	0	C	0-1	0	Expected
Purse-Snatching	1	0	T	0-2	0	Expected
Shoplifting	10	0	C	3-17	12	Expected
Theft from Building	16	0	C	12-20	3	Low
Theft from Machine	0	0	C	0-0	0	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Theft from Vehicle	12	1	C	3-21	11	Expected
Theft of MV Parts	0	0	T	0-2	1	Expected
Other Theft	44	-2	T	23-48	36	Expected
Auto Theft	8	1	C	2-14	2	Expected
Forgery	5	0	C	2-8	2	Expected
Fraud/Con Games	10	1	T	7-23	13	Expected
Credit Card Fraud	4	1	T	0-14	0	Expected
Identity Theft	9	1	T	4-23	7	Expected
Employee Theft	1	0	T	1-5	0	Low
Extortion	0	0	C	0-0	0	Expected
Stolen Property	3	0	C	0-6	3	Expected
Vandalism	47	-3	T	27-44	41	Expected
Drugs	12	1	T	8-24	13	Expected
Statutory Rape	0	0	C	0-1	0	Expected
Pornography	0	0	C	0-1	1	Expected
Prostitution	0	0	C	0-0	0	Expected
Weapons	3	1	T	2-8	8	Expected
Bad Checks	2	0	C	1-3	0	Low
Disorderly	7	0	C	4-10	2	Low
Drunk Driving	13	1	T	8-25	16	Expected
Drunkenness	4	-1	T	0-6	2	Expected
Family Offenses	0	0	C	0-0	0	Expected
Liquor Laws	5	1	T	4-12	6	Expected
Trespassing	4	0	C	1-7	3	Expected
Violent Total	49	2	C	36-62	79	High
Property Total	198	0	C	177-219	146	Low
Total	299	10	C	251-347	276	Expected

Kidnapping

Ludlow Police recorded two kidnapping incidents in the fall of 2018, the first reported by the agency since 2013. The first lists a 17-year-old female from Belchertown as the victim, with no offender, and a weapon of "Drugs." The second indicates that a 26-year-old man from Ludlow kidnapped a 26-year-old woman from Springfield. There is otherwise insufficient data to determine the nature of the incidents without a narrative review.

Simple assault

Ludlow is one of several communities in the area to see a significant increase in domestic simple assaults (assaults without dangerous weapons and without serious injury) in the final four months of the year, coinciding with the opening of MGM Springfield. The events are spread out over the town and show no particular geographic or temporal concentrations. As with the other communities, a full review of narratives will be necessary to fully understand this trend.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	3	0	C	0–3	9	High
Disabled Vehicle	53	-1	C	44–62	57	Expected
Disturbance	303	-19	T	164–302	194	Expected
Domestic Dispute	54	-1	C	44–64	78	High
General Service	307	7	T	256–406	361	Expected
Medical	546	24	T	627–675	573	Low
Psychological	2	0	C	0–4	2	Expected
Suspicious Activity	187	14	T	180–319	197	Expected
Traffic Collision	195	5	T	176–257	202	Expected
Traffic Complaint	29	2	T	26–36	51	High
Vagrancy	1	0	T	1–2	0	Low

Abandoned vehicles

The total isn't particularly high compared to other communities, but the 9 "abandoned vehicle" incidents reported by Ludlow in the last four months of 2018 are high for this community. The incidents are split 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.

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. A review of CAD narratives might supply more clues as to the nature of this trend.

Traffic complaints

Complaints of "erratic operation" increased in Ludlow during this period, primarily on Center Street (Route 21), concentrated in the evenings between 16:00 and 23:00.

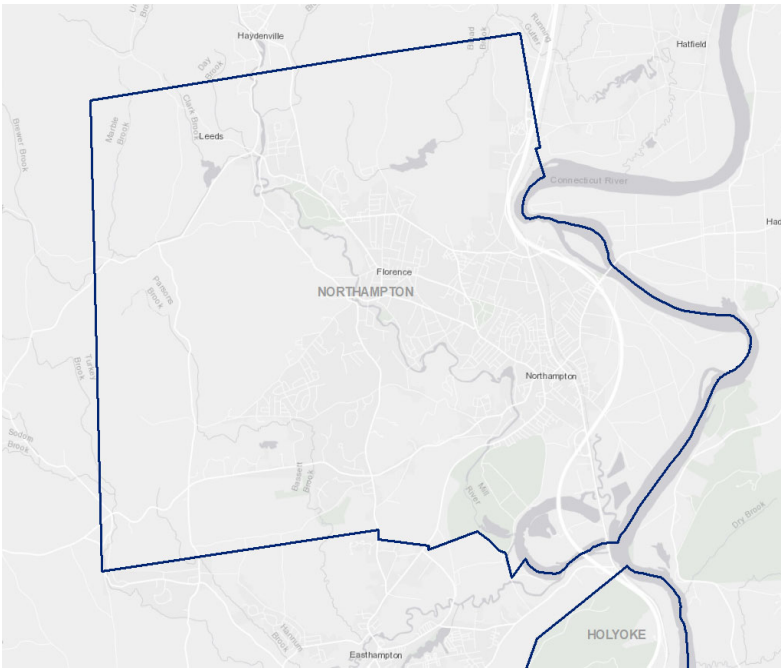
Collisions reported to Ludlow, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	116	8	T	113–186	123	Expected
Parked vehicle	27	1	C	19–35	32	Expected
Pedestrian	3	-1	T	0–6	1	Expected
Bicyclist	1	0	C	0–2	2	Expected
Animal	4	1	T	3–11	4	Expected
Fixed object	21	2	T	17–36	25	Expected
Curb/barrier	10	0	T	8–17	13	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Rollover/Jackknife	2	0	C	1-3	3	Expected
Other/Unknown	11	-1	T	2-13	11	Expected
Total	195	10	T	189-284	214	Expected

Ludlow's traffic collisions increased steadily from 2010 to 2017, so it was nice to see that 2018 reversed rather than continue the trend. No category outperformed its expected window for this period.

4-month comparison: Northampton



Population (est. 2016): 28,549

Area: 35.8 square miles

Police officers: 63

City center distance from MGM: 16.70 miles

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. Violent crime and total crime were low for the agency during the last four months of 2018, and only a couple of crimes and call-for-service categories showed significant increases. The agency will want to monitor and analyze its bad/forged check situation, discussed below.

Crimes reported to Northampton, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	14	1	T	11-29	14	Expected
Kidnapping	2	0	C	0-5	0	Expected
Robbery	5	0	C	2-8	3	Expected
Aggravated Assault	29	2	T	33-48	27	Low
Simple Assault	99	-2	C	86-112	75	Low
Threats	23	-2	T	7-27	13	Expected
Arson	1	0	C	0-2	0	Expected
Burglary	42	-7	T	0-34	28	Expected
Theft from Persons	1	0	C	0-2	0	Expected
Purse-Snatching	0	0	C	0-1	1	Expected
Shoplifting	46	4	T	35-87	52	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Theft from Building	78	-6	T	41-66	42	Expected
Theft from Machine	0	0	T	0-1	0	Expected
Theft from Vehicle	27	-2	T	0-43	9	Expected
Theft of MV Parts	9	-2	T	0-10	6	Expected
Other Theft	42	-1	C	33-51	30	Low
Auto Theft	8	-2	T	0-10	8	Expected
Forgery	9	-1	T	0-10	13	High
Fraud/Con Games	17	1	T	15-29	20	Expected
Credit Card Fraud	6	0	C	1-11	4	Expected
Identity Theft	14	-1	C	8-20	6	Low
Employee Theft	1	0	T	0-2	0	Expected
Extortion	0	0	T	0-1	1	Expected
Stolen Property	5	0	C	2-8	4	Expected
Vandalism	74	-6	T	25-73	47	Expected
Drugs	33	-3	C	14-52	17	Expected
Statutory Rape	2	0	T	1-5	3	Expected
Pornography	2	0	T	1-5	2	Expected
Prostitution	0	0	C	0-1	0	Expected
Weapons	4	0	C	0-8	2	Expected
Bad Checks	2	0	C	0-4	6	High
Disorderly	23	-1	C	16-30	13	Low
Drunk Driving	41	3	T	25-88	27	Expected
Drunkenness	55	-8	T	0-56	28	Expected
Family Offenses	0	0	C	0-1	0	Expected
Liquor Laws	14	-1	T	1-17	8	Expected
Trespassing	14	-1	C	7-21	18	Expected
Violent Total	173	0	C	153-193	132	Low
Property Total	379	-24	T	234-338	271	Expected
Total	684	-20	T	567-746	527	Low

Forgery and bad checks

The two incident types to increase in Northampton are likely related, as the offense code for most of the "forgery" incidents is "forgery of check." Technically, *forgery* means the check was always counterfeit, while *bad checks* are written on accounts with insufficient funds. In practice, the categories are often conflated, and either way, Northampton saw a decade high in both crimes during this period.

The incidents seem to involve different suspects. Among them, six individuals, all but one female, all from the surrounding area, are identified as offenders within the data. CVS Pharmacies show up in three incidents, but otherwise the incidents are scattered. The nature of the incidents suggests the use of the checks to pay for services rather than obtain cash, lessening the likelihood of a casino relationship, but the crime otherwise has a logical connection to a casino and should thus be monitored.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	7	-1	T	0–10	3	Expected
Disabled Vehicle	99	-4	T	57–100	109	High
Disorderly	567	0	C	498–636	451	Low
General Service	285	3	C	256–314	322	High
liquor	112	-1	C	83–141	77	Low
Lost Property	154	2	C	126–182	127	Expected
Medical	528	27	T	539–752	574	Expected
Overdose	7	3	T	12–24	13	Expected
Psychological	56	-20	T	0–75	3	Expected
Suspicious Activity	714	-68	T	243–624	509	Expected
Traffic Collision	462	2	C	411–513	479	Expected
Traffic Complaint	308	-4	C	265–351	272	Expected
Vagrancy	11	2	T	9–29	4	Low

Disabled vehicles

Disabled vehicles had been on a slight decrease in Northampton during the last decade, but 2018 abruptly reversed the trend and delivered the highest total since 2011. With no geographic or temporal concentration, it's hard to identify a cause for this one, but with no comparable increase in other vehicle-related calls-for-service and no complementary increase in other communities, a relationship to MGM seems unlikely.

General service

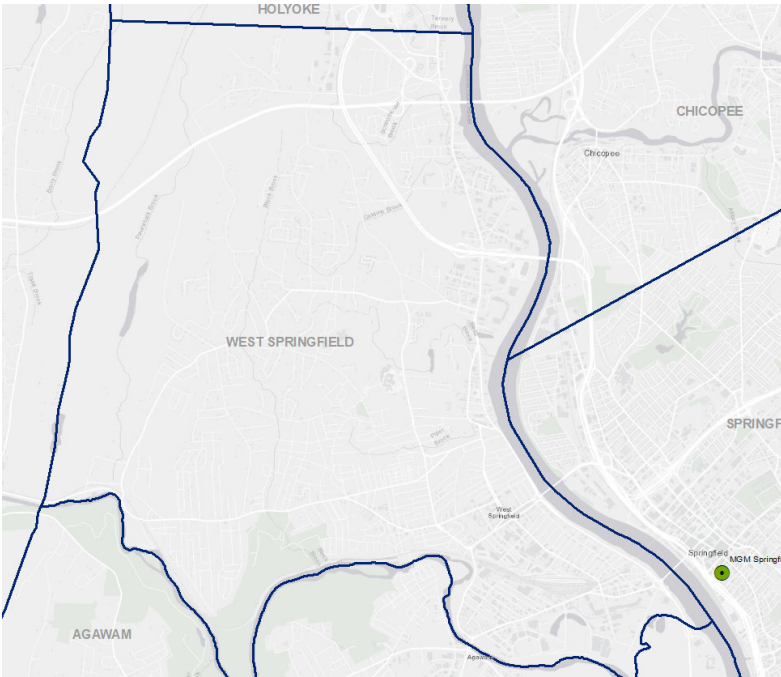
The small increase in this category seems to be related to ride-alongs, which the agency did not track as a subcategory until 2017. There was also increase in calls coded "Assist/service calls," with repeat calls to a few residential addresses accounting for the increase. There doesn't seem to be any MGM nexus with this one.

Collisions reported to Northampton, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	146	-3	C	120–172	130	Expected
Parked vehicle	19	-2	T	0–19	18	Expected
Pedestrian	7	0	T	0–10	3	Expected
Bicyclist	5	0	C	3–7	3	Expected
Animal	8	1	T	3–15	19	High
Fixed object	15	0	C	8–22	11	Expected
Curb/barrier	9	0	C	4–14	5	Expected
Rollover/Jackknife	1	0	C	0–2	2	Expected
Other/Unknown	5	0	C	3–7	8	High
Total	215	-5	T	149–240	199	Expected

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 remained nominal in the city.

4-month comparison: West Springfield



Population (est. 2016): 28,529

Area: 17.5 square miles

Police officers: 84

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. Four 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 2016 and 2017, and about average for the last 7 years.

However, there are several signs that West Springfield is seeing extra activity post-MGM, some of which may be related to the casino. First, although violent, property, and total crimes were within expected ranges for the city, among the individual categories are found more increases than any other reporting agency. A pattern of purse snatching could plausibly be related to MGM. So far, West Springfield is the only city or town with a confirmed increase in activity at service locations like gas stations and convenience stores—in this case increased disturbance and suspicious activity calls along two commercial areas near Springfield bridges. Finally, traffic collisions and traffic complaints have both significantly increased in the city, and in a manner that provides a spatial connection to MGM.

Crimes reported to West Springfield, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0–1	0	Expected
Sexual Assault	10	1	T	6–19	14	Expected
Kidnapping	2	0	C	0–4	1	Expected
Robbery	12	-1	C	6–18	7	Expected
Aggravated Assault	37	1	C	29–45	34	Expected
Simple Assault	80	-8	T	38–61	67	High
Threats	27	-3	T	5–26	23	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Arson	2	0	C	0-5	2	Expected
Burglary	74	-6	T	14-85	54	Expected
Theft from Persons	2	0	C	0-4	2	Expected
Purse-Snatching	3	0	T	0-5	6	High
Shoplifting	108	8	T	91-191	117	Expected
Theft from Building	51	-1	C	37-65	37	Expected
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	50	-3	C	24-76	41	Expected
Theft of MV Parts	1	0	T	0-1	1	Expected
Other Theft	181	-7	T	94-214	133	Expected
Auto Theft	28	-3	T	0-33	22	Expected
Forgery	11	-1	T	5-14	4	Low
Fraud/Con Games	26	0	C	18-34	44	High
Credit Card Fraud	5	0	C	2-8	2	Expected
Identity Theft	16	0	C	11-21	23	High
Employee Theft	3	1	T	3-11	2	Low
Extortion	0	0	C	0-0	0	Expected
Stolen Property	12	-1	T	0-14	15	High
Vandalism	124	-10	T	52-112	99	Expected
Drugs	36	-4	T	0-42	38	Expected
Statutory Rape	2	0	C	1-3	2	Expected
Pornography	1	0	C	0-2	3	High
Prostitution	1	0	C	0-2	0	Expected
Weapons	4	0	C	1-7	4	Expected
Bad Checks	3	-1	T	0-2	1	Expected
Disorderly	14	-1	C	8-20	11	Expected
Drunk Driving	10	-1	T	0-15	4	Expected
Drunkenness	1	-1	T	0-2	0	Expected
Family Offenses	1	0	T	0-2	1	Expected
Liquor Laws	3	-1	T	0-4	1	Expected
Trespassing	11	-2	T	0-17	7	Expected
Violent Total	168	-10	T	98-154	146	Expected
Property Total	698	-23	T	485-731	604	Expected
Total	886	-36	T	627-956	822	Expected

Simple assault

West Springfield joins many area communities in reporting an increase in simple assaults, although in West Springfield's case, it's more of a lack of an expected decrease; the crime declined steadily between 2010 (115) and its decade low in 2017 (57), and the predictive statistics assumed the trend would continue. The final number is not terribly high given the historic data. Moreover, West Springfield's increase does not indicate domestic assault like it does in some of the other communities. Most of the charges are non-domestic. Unfortunately, nothing can be told about the crime based on location type as the agency overuses the "other/unknown" category.

Purse snatching

West Springfield saw a pattern of purse snatchings along Riverdale Street between September and December of 2018, most in the evenings between 16:00 and 22:00. Incidents are listed at places like Panera Bread, the Super 8 Motel, Pride Gas, and KFC. Four of the victims were women over the age of 60, and most were from the local area. Police made arrests or charges in three of the cases, all of which involved different offenders. The crime has a logical and spatial relationship to the presence of MGM and could easily be related to the casino on either the victim or offenders' sides.

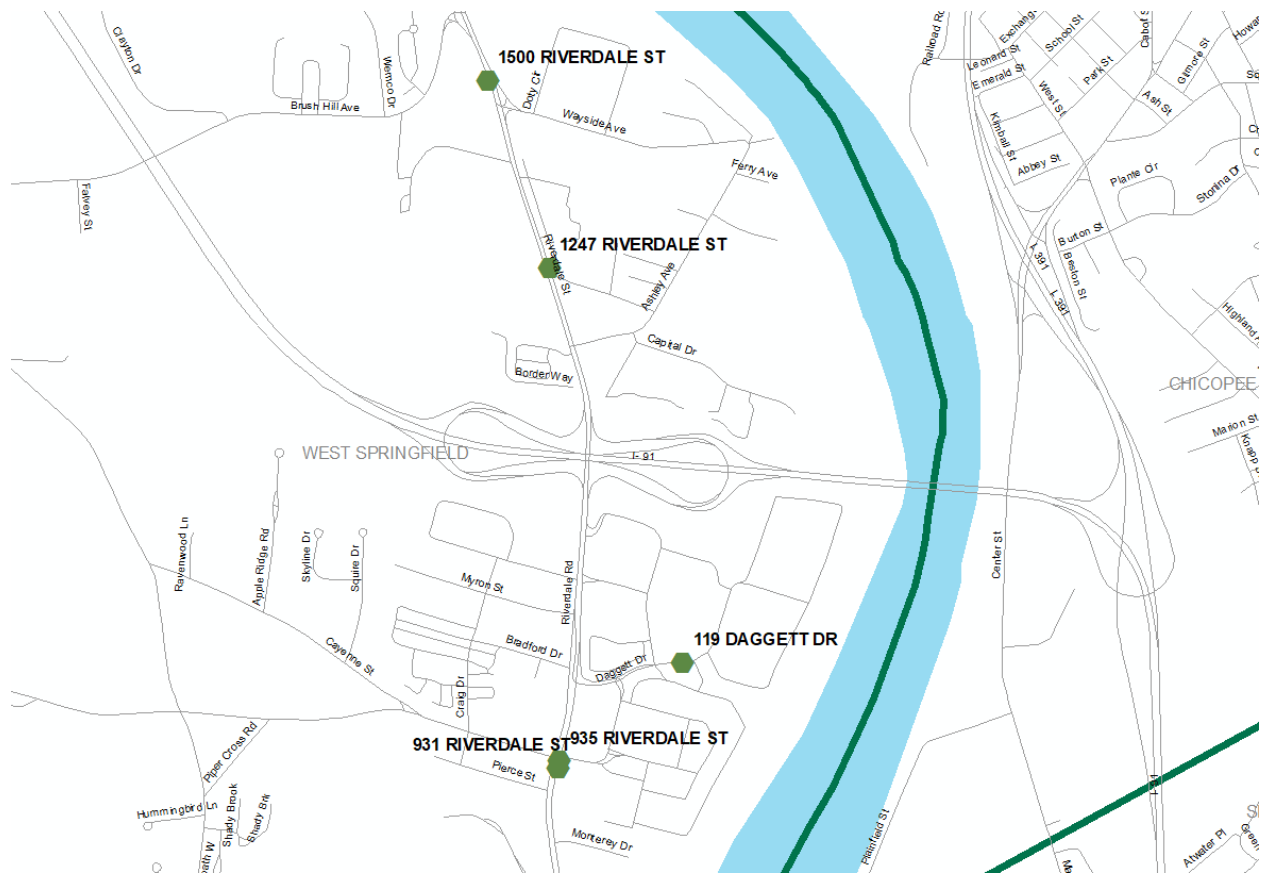


Figure 11: Locations of a pattern of purse snatchings in West Springfield in the fall of 2018.

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. 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. There is a potential logical tie between this type of crime and a casino, although no other agency reported a similar increase during this period. In the next report, we will review a larger number of samples from different agencies.

Identity theft

Identity theft has been increasing all over Massachusetts for several years, but the Springfield area has proven mostly immune to that trend. West Springfield is an exception, reporting a 9-year high (for September–December) in 2018. The crime is a complex one, and little can be determined without reading the full narrative. That over 50%

happened at residences and another 25% happened at “unknown” location types suggests that most of the incidents are online or out-of-town frauds being reported by West Springfield residents.

Pornography

Three incidents include a September arrest of a West Springfield man for child pornography and incidents in October or November apparently involving teenagers with images of themselves or underage schoolmates. There’s no reason to suspect an MGM influence in any of the cases.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Disturbance	660	-44	T	341–602	601	Expected
Domestic Dispute	114	18	T	120–253	188	Expected
General Service	280	-30	T	25–278	225	Expected
Suspicious Activity	422	-1	C	388–456	472	High
Traffic Collision	615	-6	C	535–695	696	High
Traffic Complaint	273	7	C	221–326	346	High

Disturbances

Disturbance calls are technically within their predicted range, but only just so, and I wanted to make sure there weren’t any major patterns—such as hotel responses—reflected in the increase. The call volume isn’t very high compared to past years (it started at a peak of 897 in 2010), but the 2018 total did reverse a trend of steady decreases over the years.

One trend, likely related to MGM, became apparent: an increase in disturbance calls on Park Street, just over the bridge and off the rotary from Springfield. Small but significant increases in calls were seen at a Cumberland Farms, a Dunkin’ Donuts, Rotary Liquors, and Mamma Mia’s Pizza, likely suggesting an increase in customers stopping on their way out of the casino. There have also been reports of panhandling in this area.

Suspicious Activity

Park Street also held about 33% of the increase in suspicious activity calls; the rest can be attributed to Memorial Avenue. Both streets are right across bridges from Springfield and could easily be affected by extra traffic from the casino. The specific nature of the calls is unknown (they may be related to the aforementioned panhandlers), but this is the type of call that tends to go up when traffic in an area increases.

Traffic Collisions

Unlike most of the agencies in the area, West Springfield’s collisions were relatively static between 2010 and 2017. Then, in the last four months of 2018, calls for service for collisions increased about 13% from the average, and reported collisions (the table below) increased 21%. The increase in calls (which include nonreportable collisions like fender-benders with no injury and low property damage value) is highest on Memorial Avenue, Main Street, Park Street, and Westfield Street from September through November, heaviest in the afternoon and evenings between 13:00 and 20:00, no particular days of the week. All of these streets are near the Springfield border and funnel traffic to the Memorial Bridge. It is entirely possible that they are experiencing higher traffic headed to the casino and thus more collisions.

Traffic Complaints

Yet another category that tends to increase with volume of traffic, traffic complaints hit a 9-year high in West Springfield in 2018. Riverdale Street (Route 5) has the largest part of the increase; the rest is found on Westfield Street (Route 187). The nature of the calls is not part of the CAD dataset, but the increase has been most notable between 14:00 and 22:00.

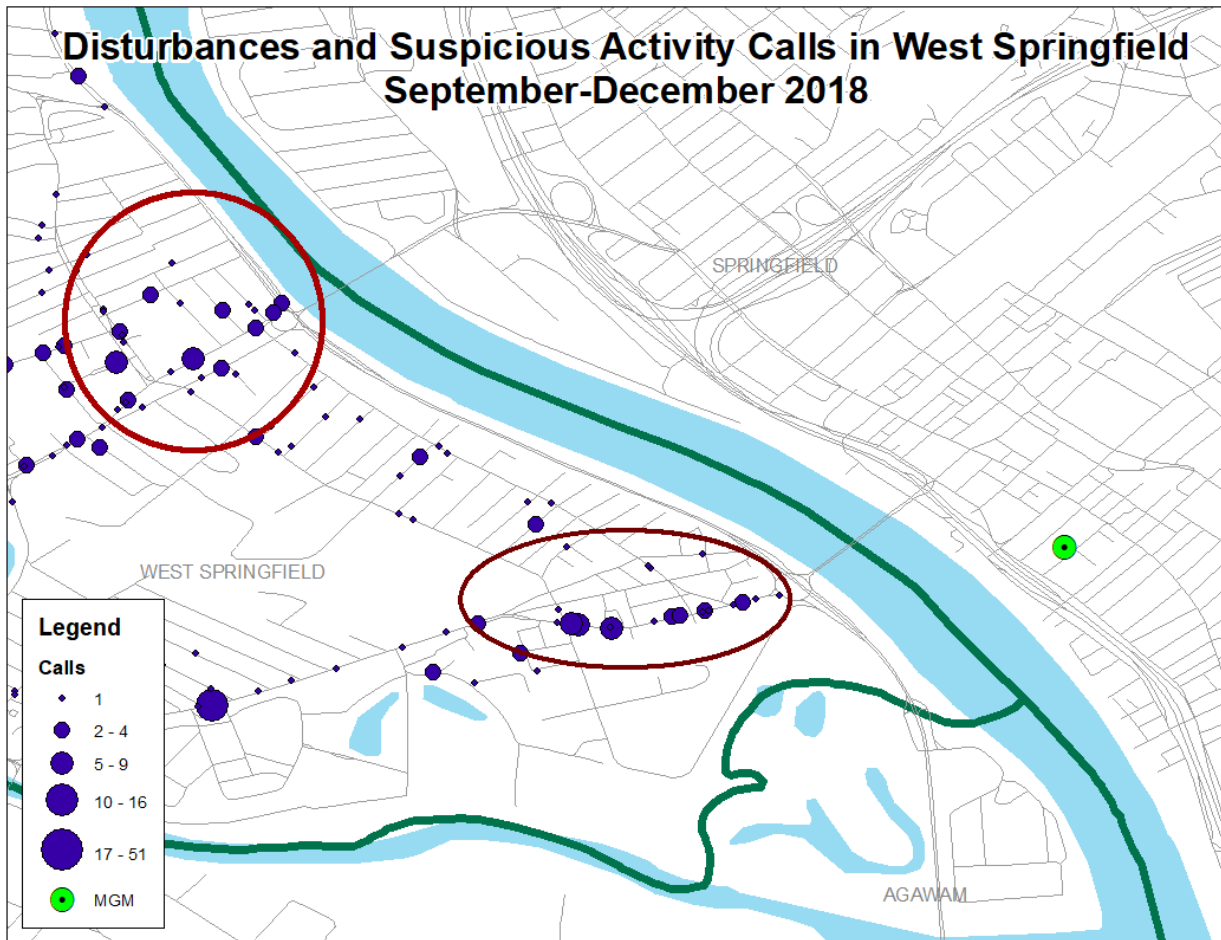


Figure 12: Disturbances and Suspicious activity calls in West Springfield post-MGM show hot spots running through commercial areas that lead to Springfield bridges.

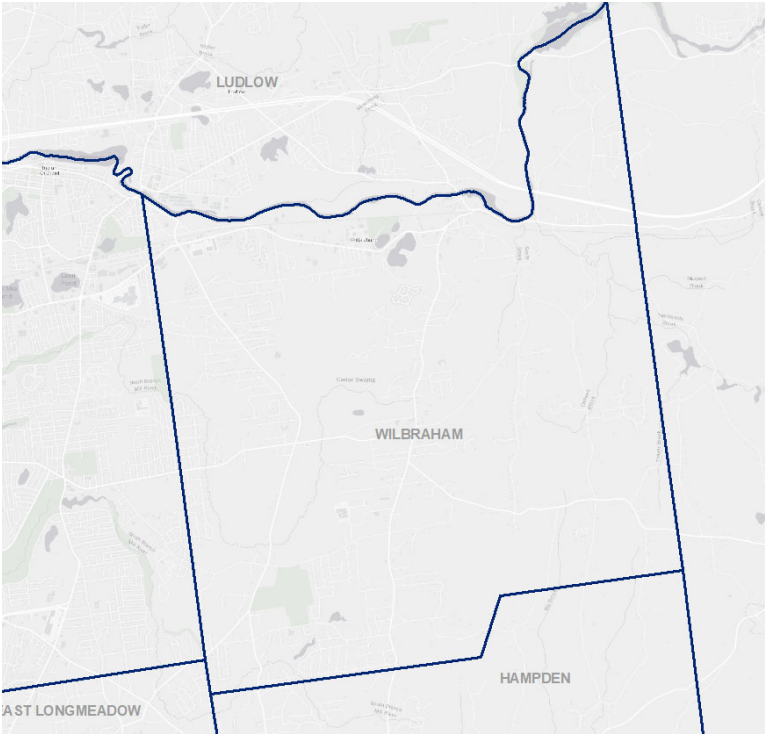
Collisions reported to West Springfield, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	189	-2	C	161–217	232	High
Parked vehicle	22	1	C	14–30	36	High
Pedestrian	9	0	C	5–13	12	Expected
Bicyclist	3	0	C	1–5	1	Expected
Animal	2	0	C	0–4	4	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Fixed object	18	-1	C	13-23	20	Expected
Curb/barrier	17	0	C	13-21	12	Low
Rollover/Jackknife	1	0	C	0-1	0	Expected
Other/Unknown	7	0	C	3-11	8	Expected
Total	268	-3	C	233-303	325	High

West Springfield reported high traffic collision totals in 2018, and like the calls for service, much of the increase is on the east side of the city where it could be influenced by MGM. Riverdale Street and Memorial Avenue bear the brunt of the increase. Both pass through heavily-trafficked shopping areas and feed into direct routes to MGM.

4-month comparison: Wilbraham



Population (est. 2016): 14,684

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. There is no evidence of an increase in retail crimes along Route 20, which was our primary concern at the outset. Instead, the agency experienced total crime and property crime within expected parameters, but an increase in domestic-related simple assaults drove up violent crime during this period. 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 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	2	0	C	0-4	3	Expected
Kidnapping	0	0	C	0-1	0	Expected
Robbery	1	0	C	0-2	1	Expected
Aggravated Assault	4	0	C	1-7	4	Expected
Simple Assault	16	0	C	13-19	22	High
Threats	14	-1	T	5-16	17	High
Arson	0	0	C	0-1	0	Expected
Burglary	15	-2	T	0-22	6	Expected
Theft from Persons	0	0	T	0-1	0	Expected
Purse-Snatching	0	0	C	0-0	0	Expected
Shoplifting	13	1	C	6-20	25	High
Theft from Building	6	-1	C	0-14	3	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	13	-3	T	0-22	5	Expected
Theft of MV Parts	0	0	C	0-1	0	Expected
Other Theft	29	-4	T	1-26	16	Expected
Auto Theft	5	-1	C	0-11	1	Expected
Forgery	3	0	T	0-3	1	Expected
Fraud/Con Games	5	0	C	2-8	6	Expected
Credit Card Fraud	2	0	C	0-5	2	Expected
Identity Theft	3	0	T	2-7	3	Expected
Employee Theft	1	0	C	0-2	0	Expected
Extortion	0	0	C	0-0	0	Expected
Stolen Property	2	0	C	0-4	2	Expected
Vandalism	22	-2	T	0-27	20	Expected
Drugs	16	0	C	0-32	6	Expected
Statutory Rape	2	0	C	0-4	0	Expected
Pornography	0	0	C	0-1	0	Expected
Prostitution	0	0	C	0-0	0	Expected
Weapons	2	0	C	0-5	1	Expected
Bad Checks	1	0	C	0-2	1	Expected
Disorderly	4	0	C	2-6	2	Expected
Drunk Driving	19	1	C	10-28	16	Expected
Drunkenness	4	0	C	1-7	6	Expected
Family Offenses	0	0	C	0-0	0	Expected
Liquor Laws	6	1	T	2-20	5	Expected
Trespassing	3	0	T	1-8	4	Expected
Violent Total	38	-1	C	32-44	47	High
Property Total	120	-11	T	33-114	90	Expected
Total	204	-21	T	95-197	178	Expected

Simple assaults and threats

The increases in both of these crimes are clearly explained by higher-than average domestic violence totals for Wilbraham in the last four months of 2018, with 77% of assaults occurring at residences and 68% showing a charge code that indicates domestic violence. The increase in threats is related to the violations of abuse prevention orders, many of them issued after previous acts of violence (the agency does not seem to use the goF "family offenses" code in such situations). An MGM relationship is unlikely. Although there are complex social mechanisms by which a casino can lead to an increase in domestic violence, it would be rare to be so sudden and localized. Assaults were high for the entire year, and not just during the four post-casino months.

Shoplifting

The increase is localized entirely at the Home Depot, which reported between 2 and 10 shopliftings per year between 2010 and 2016 but shot up to 19 in 2017 and 29 in 2018. The increase could reflect an increase in actual

shoplifting at the store, but its suddenness—and a lack of complementary increases in other stores in the region—suggests that a change in security policy or practice is more likely to credit.

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

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	2	0	C	0–4	1	Expected
Disabled Vehicle	58	3	T	43–97	76	Expected
Disorderly	41	1	C	31–51	44	Expected
Domestic Dispute	49	4	T	56–79	57	Expected
General Service	198	3	C	171–225	229	High
Gunshots	8	1	T	9–22	6	Low
Hunting	3	0	C	0–6	8	High
Lost Property	15	0	T	14–21	17	Expected
Medical	296	13	T	233–456	364	Expected
Psychological	13	1	T	12–22	21	Expected
Suspicious Activity	305	2	C	232–378	262	Expected
Traffic Collision	139	0	C	114–164	147	Expected
Traffic Complaint	70	5	T	62–111	96	Expected

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 10–29 December period and Wilbraham had three on Saturday, 15 December. The CAD data offers no additional information on the events.

Collisions reported to Wilbraham, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Vehicle in traffic	67	0	C	54–80	73	Expected
Parked vehicle	11	0	C	5–17	10	Expected
Pedestrian	1	0	T	0–2	0	Expected
Bicyclist	1	0	T	0–3	1	Expected
Animal	13	2	T	7–32	16	Expected
Fixed object	15	1	C	10–20	16	Expected
Curb/barrier	7	-1	T	0–12	4	Expected
Rollover/Jackknife	0	0	C	0–1	0	Expected

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Other/Unknown	4	-1	T	0-5	7	High
Total	120	1	C	98-142	127	Expected

Total collisions were in the normal range in Wilbraham, with the exception of the "other/unknown" category, whose very name makes it difficult to analyze what might be happening with the (small) increase.

4-month comparison: State Police



Figure 13: 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 operate 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 and re-allocated 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 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Abandoned Vehicle	6	1	T	4–14	14	Expected
Assault	4	0	T	3–7	6	Expected
Building Check	1267	158	T	1114–2730	1717	Expected
Disabled Vehicle	871	-23	T	529–980	992	High
Disturbances	12	0	C	6–18	19	High
Domestic Dispute	5	0	C	3–7	7	Expected
Drugs	18	-2	T	0–31	30	Expected
General Service	45	-5	C	7–83	46	Expected
Gunshots	13	3	T	8–37	40	High
Lost Property	10	-1	T	0–13	13	Expected
Medical	32	2	T	21–58	39	Expected
Psychological	3	0	C	1–5	1	Expected
Robbery	4	0	C	1–7	2	Expected
Suspicious Activity	14	1	T	14–24	11	Low
Traffic Collision	744	24	T	710–991	770	Expected
Traffic Complaint	227	-10	T	127–238	232	Expected
Trespassing	6	0	C	2–10	2	Expected

Disabled vehicles

A record-high number of disabled motorists were seen principally on the Massachusetts Turnpike (Route 90) and Route 91. It's not impossible that these motorist-assist calls reflect extra traffic coming to the area for MGM, but if so, it isn't reflected in other vehicle-related call types.

Disturbances

A miscellany of incidents primarily in Springfield, Holyoke, and Chicopee. There are no commonalities among the incidents and no clear explanation for the increase.

Gunshots

As part of its partnership with the Springfield Police Department, the State Police respond to gun-related violence within the city. Most of the calls seen here, then, are duplicating those seen in the Springfield Police Department's statistics, and as there, the increase seems to be related to a wider implementation of the ShotSpotter detection system rather than a real increase in the number of shots fired in the city.

Crashes on state roadways, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
I-90	105	1	C	88–122	107	Expected
I-91	380	19	T	367–561	395	Expected
I-291	82	1	C	63–101	88	Expected
I-391	55	1	T	52–67	62	Expected
Hwy 5	40	2	C	22–58	36	Expected
Hwy 57	24	1	T	22–39	27	Expected

Crashes on all state roadways were within expected ranges, suggesting that the highways were able to effectively absorb the extra traffic heading to MGM.

Before-and-after comparison of other variables

The 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 all agencies except East Longmeadow and Hampden, where they decreased. These figures do not include the 115 people 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 (albeit at the high end of it).

Individuals arrested, 1 September–31 December, region⁵

Agency	Pre-MGM Avg.	Slope	Window Type	Pred. Window	Actual 2018	Result
Agawam	161	8	T	144–234	224	Expected
Chicopee	354	-17	T	214–346	319	Expected
East Longmeadow	84	14	T	94–211	53	Low
Hampden	41	-3	T	20–45	19	Low
Holyoke	915	-53	T	608–815	639	Expected
Longmeadow	27	-1	C	15–39	19	Expected
Ludlow	176	13	T	197–267	206	Expected
Northampton	311	-15	T	190–319	214	Expected
Springfield	1523	-38	T	1035–1663	1555	Expected
Wilbraham	193	14	T	158–350	198	Expected
West Springfield	228	-5	T	168–251	211	Expected
Total	4013	-83	T	3386–3987	3657	Expected

The only crimes to see a significant increase in arrests among the participating communities were non-felony assaults (in keeping with the overall crime statistics above), thefts from persons, pornography, and weapons violations.

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 or uniquely problematic. It was a simple recognition that every time you increase the number of people at a location, crimes tend to increase as well.

⁵ Excludes Chicopee

By and large, this has not happened in the first four months. 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, and most retail establishments were well within the predicted window. Hotel crime actually fell considerably.

The only location type to see an appreciable increase was transportation stations (“air/bus/train terminal”), increasing 62% from its average and reversing a slight decreasing trend. A full 70% 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, 1 September–31 December

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	Actual 2018	Result
Air/Bus/Train Terminal	45	-2	T	7–55	74	High
Bank	121	-5	T	74–132	95	Expected
Bar	190	-23	T	55–141	99	Expected
Church	69	-5	T	17–84	53	Expected
Construction Site	29	-2	T	0–42	18	Expected
Convenience Store	311	-6	T	221–351	272	Expected
Department Store/Mall	611	-22	T	405–658	458	Expected
Drug/Doctor/Hospital	247	-4	C	219–275	214	Low
Field/Woods/Park	160	-7	T	106–162	101	Low
Gas Station	177	1	C	144–210	186	Expected
Government/Public	569	0	C	526–612	535	Expected
Grocery	228	3	C	208–248	174	Low
Hotel	170	-1	C	121–219	118	Low
Jail	13	2	T	12–30	10	Low
Lake/Waterway	8	-2	T	0–7	8	High
Liquor Store	57	0	C	47–67	44	Low
Office	554	-22	T	347–587	445	Expected
Other/Unknown	2294	139	T	2423–3102	3539	High
Parking Lot/Garage	724	-69	T	271–643	363	Expected
Rental Storage	37	0	C	25–49	24	Low
Residence	9229	-341	T	7424–8177	8378	High
Restaurant	340	-3	C	302–378	299	Low
School	737	-106	T	213–400	349	Expected
Specialty Store	27	5	T	9–64	41	Expected
Street	292	-1	C	262–322	247	Low

Residents, where crimes had been declining steeply for 10 years, saw a sudden flattening of that trend, and thus a higher-than-expected total for 2018. The largest categories to increase at residences were aggravated and simple assaults, fraud, weapons violations, and the useless “all other” category. Incidents at “other/unknown” locations also saw a steep increase during the period, and we would remind

participating agencies that more accurate coding in this category can better help identify patterns and trends.

We will continue to monitor other locations and location types to see if trends change.

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.

Future reports will look at three specific geographies:

- The Springfield neighborhoods immediately adjacent to the casino
- Sub-geographies of other communities with a focus on travel routes to and from MGM Springfield
- Radiuses around highway exits in surrounding communities, where travelers to and from MGM Springfield might be expected to visit for lodging and services

With only four months of data, however, statistics are too small to show any meaningful trends in small subdivisions of these communities. For this report, covering just four months, we will focus on the area immediately adjacent to the casino.

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 over 1.5 million people in a four-month period. These visitors, 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 are 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, since 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.

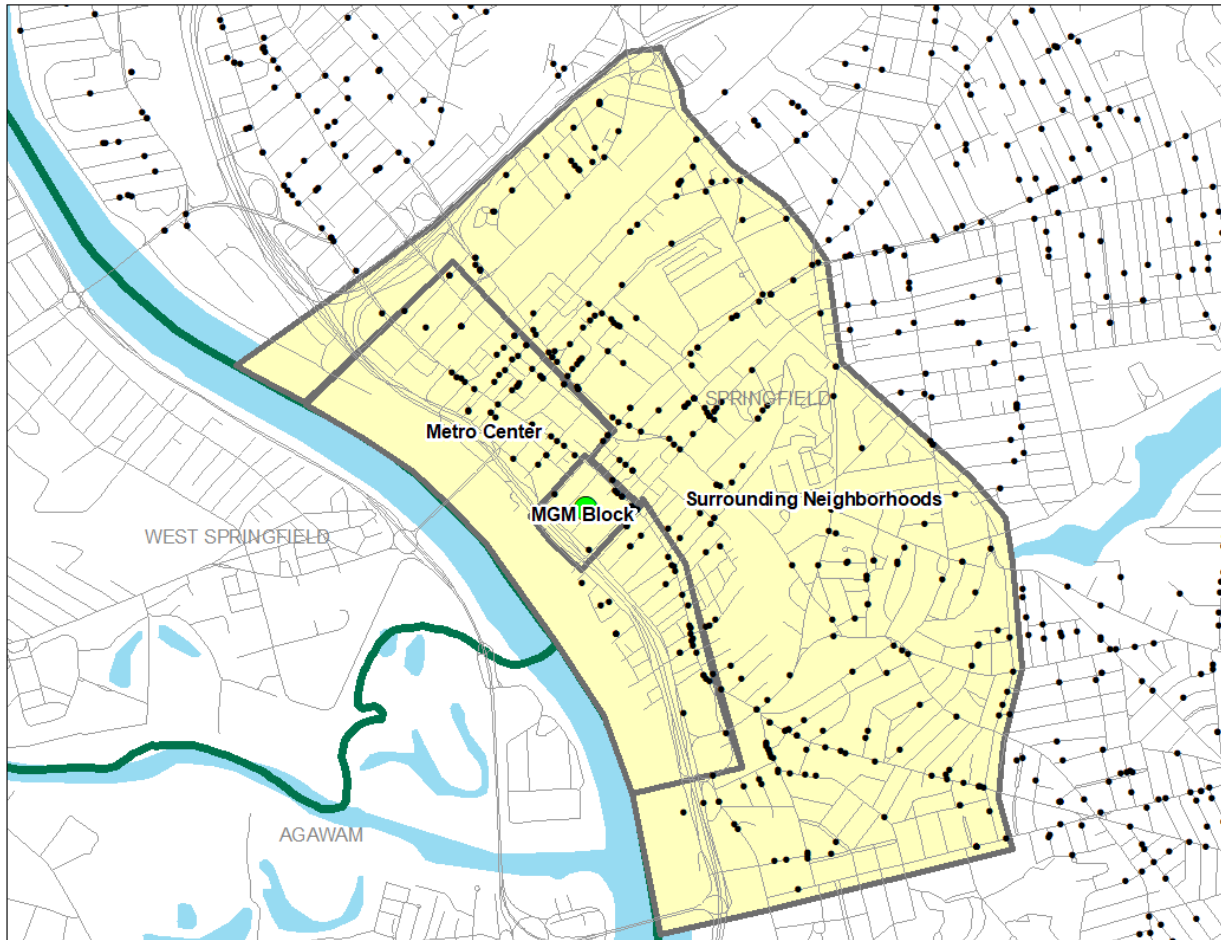


Figure 14: The three geographies analyzed in this section. Borders take in both sides of major streets.

The statistics we've been using so far in this report don't work quite as well for smaller areas and smaller statistics, so we'll compare 2018 to a straight average of the previous five years. To avoid wasting time with very low numbers, I have eliminated (put into the "All Other" category) crimes that reported an average and 2018 figure of less than 2.

Crimes on the MGM block, September–December

Crime	2013	2014	2015	2016	2017	Avg.	2018
Sexual Assault	2	0	2	0	0	0.8	2
Robbery	2	2	1	3	0	1.6	0
Simple Assault	5	12	6	10	2	7.0	7
Threats	9	7	5	5	5	6.2	4
Burglary	1	2	1	5	2	2.2	0
Theft from Vehicle	7	7	4	5	1	4.8	8
Other Theft	13	13	9	2	2	7.8	1
Auto Theft	0	3	1	0	0	0.8	3
Vandalism	4	4	6	5	3	4.4	4
Drugs	0	1	3	2	1	1.4	1

Crime	2013	2014	2015	2016	2017	Avg.	2018
Disorderly	3	3	1	3	2	2.4	6
Trespassing	0	1	0	1	0	0.4	2
All Other	30	20	19	26	19	22.8	27
Total	76	75	58	67	37	62.6	65

A mix. Total crime remained almost unchanged on the block. There hasn't been a robbery or burglary since MGM opened, but all the extra cars in the area have clearly proven too tempting a target to car burglars and auto thieves (not that the numbers are *very* high). Some disorderly patrons have spilled onto the street. The two sexual assaults are the most disturbing, although one seems to have been committed by someone who knew the victim at an area restaurant.

Crimes in the Metro Center, September–December

Crime	2013	2014	2015	2016	2017	Avg.	2018
Sexual Assault	2	2	2	0	3	1.8	4
Kidnapping	0	2	0	2	3	1.4	2
Robbery	25	18	17	15	16	18.2	21
Aggravated Assault	29	22	28	22	18	23.8	22
Simple Assault	53	67	68	75	62	65.0	63
Threats	28	32	30	33	33	31.2	29
Burglary	30	27	12	14	16	19.8	13
Theft from Persons	7	6	2	3	1	3.8	4
Shoplifting	3	13	7	13	9	9.0	10
Theft from Building	21	14	5	16	20	15.2	34
Theft from Machine	0	0	0	3	1	0.8	4
Theft from Vehicle	36	36	22	38	26	31.6	31
Theft of MV Parts	0	0	4	4	5	2.6	3
Other Theft	85	105	65	28	17	60.0	16
Auto Theft	12	14	11	9	11	11.4	5
Forgery	5	5	3	3	7	4.6	4
Fraud	7	9	3	11	6	7.2	8
Credit Card Fraud	0	4	2	4	3	2.6	5
Identity Theft	2	4	9	2	1	3.6	3
Employee Theft	0	0	1	2	0	0.6	3
Stolen Property	8	5	0	2	3	3.6	6
Vandalism	42	44	59	36	23	40.8	51
Drugs	23	28	23	22	13	21.8	14
Prostitution	4	10	6	3	15	7.6	0
Weapons	10	12	8	9	5	8.8	4
Disorderly	18	12	16	19	15	16.0	25
Drunk Driving	1	4	2	2	1	2.0	2
Family Offenses	0	0	0	4	6	2.0	7
Trespassing	3	9	12	6	11	8.2	8
All Other	94	70	87	105	85	88.2	123
Total	548	574	504	506	435	513.4	524

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.) The vehicle crime increases seen in the MGM block don't seem to have spread to the surrounding area. Vice, drugs, liquor, and prostitution are absent or keeping a low profile.

Crimes in the surrounding neighborhoods, September–December

Crime	2013	2014	2015	2016	2017	Avg.	2018
Murder	2	1	1	2	0	1.2	2
Sexual Assault	21	17	14	3	13	13.6	13
Kidnapping	3	5	4	3	6	4.2	7
Robbery	60	48	56	59	47	54.0	42
Aggravated Assault	82	94	73	77	78	80.8	89
Simple Assault	286	284	278	284	236	273.6	260
Threats	148	135	136	169	151	147.8	102
Arson	1	1	3	7	0	2.4	2
Burglary	146	137	102	108	95	117.6	62
Theft from Persons	4	4	5	1	2	3.2	5
Shoplifting	0	1	5	8	9	4.6	8
Theft from Building	76	27	24	52	50	45.8	57
Theft from Machine	0	0	0	2	6	1.6	3
Theft from Vehicle	97	74	59	49	52	66.2	61
Theft of MV Parts	1	1	22	25	24	14.6	18
Other Theft	261	283	190	54	62	170.0	43
Auto Theft	53	54	54	51	61	54.6	28
Forgery	4	6	9	6	4	5.8	7
Fraud	8	16	13	17	16	14.0	8
Credit Card Fraud	1	1	10	12	10	6.8	15
Identity Theft	40	25	37	12	24	27.6	15
Extortion	0	0	0	1	0	0.2	3
Stolen Property	8	14	8	15	7	10.4	9
Vandalism	149	170	148	144	195	161.2	151
Drugs	52	62	81	81	86	72.4	75
Pornography	0	2	1	2	1	1.2	5
Prostitution	5	7	1	1	0	2.8	2
Weapons	35	40	39	34	32	36.0	54
Disorderly	62	23	23	23	34	33.0	16
Drunk Driving	5	5	1	4	2	3.4	4
Liquor Laws	4	3	3	4	6	4.0	2
Trespassing	31	14	23	32	46	29.2	42
All Other	285	246	260	411	366	313.6	360
Total	1930	1800	1683	1753	1721	1777.4	1570

Crime is down in the surrounding mixed residential/business neighborhoods—the lowest level in at least 9 years. Robberies, burglaries, auto thefts, and miscellaneous thefts are way down, although some domestic crimes have increased. Thefts from vehicles have increased elsewhere, but not here. Thefts from buildings are high, including seven at a homeless shelter. There are a couple of weird patterns like the bumps in extortion and pornography. Overall, the statistics suggest that the influence of the casino is largely contained to its immediate area.

This data represents only four months' worth of activity, and it's possible for patterns to change in either direction. We will continue to monitor these and other geographies at regular intervals.

Conclusion and future plans

This report being an initial four-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 expansive analysis of trends by working with the agencies to look at the full reports, including narratives.
- 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.

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.

Drunkness: 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. Since 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: Consensual 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