

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

Analysis of the influence of Encore Boston Harbor on its surrounding community during its first six months of operation

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Table of contents

Executive summary	3
Background and methodology.....	5
Incidents at Encore Boston Harbor.....	11
Before-and-after analysis of crime and calls for service	14
Region.....	14
Everett	18
Boston/Charlestown.....	22
Chelsea	26
Lynn.....	29
Malden.....	32
Melrose	35
Revere.....	38
Somerville	41
State police data.....	44
Selected activity.....	45
Crashes on state roadways	46
Spatial analysis	49
Future analytical plans	50
Appendix: Abbreviation and definitions	51

Executive summary

Summary

Encore Boston Harbor opened on 23 June 2019, drawing more than 3 million visitors during the first six months. As such, the facility reported various crimes, disorder, and arrests commensurate with a facility of that size hosting that many visitors. In the surrounding areas, various crimes increased and decreased. Few patterns and trends so far have shown any direct casino ties, but this report flagged a handful for future monitoring.

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 Encore Boston Harbor since the casino opened, to alert participating agencies to increasing trends (whether or not "caused" by Encore), and to triage patterns and trends for more detailed analysis in later reports.
- Data was collected from the records management systems of the Everett, Boston, Chelsea, Lynn, Malden, Melrose, Revere, and Somerville Police Departments and the Massachusetts State Police.
- For each agency and the region as a whole, historical averages and predictive windows were established for each crime.
- Any significant increases were analyzed in more detail with available quantitative data.

As an initial six-month scan, this report does not generally attempt to answer broad questions about whether Encore "caused" increases in the area. It simply identifies those increases and looks for any initial signs of an Encore connection.

Major findings

- Hosting more than 3 million visitors in its first six months of operation, Encore was the site of 124 arrests and 506 ejections during its first six months. The facility itself (just considering incidents at the casino) led to a 9.5% increase in violent crime, a 5.1% increase in property crime, a 6% increase in total crime, and a 4.1% increase in calls for service for the city of Everett. These figures are not notably high given the sheer number of people that Encore hosts, but we do not yet have good comparison data from other facilities.
- Overall violent, property, and total crime were within expected ranges for the region and most cities individually.
- The region experienced higher-than-average totals for murder, burglary, thefts from vehicles, and prostitution, but in most of these cases the 2019 totals were lower than average, just higher than predicted by the trend over the past 7 years. When analyzed city by city, no specific Encore connection could be found in these increases.
- Everett implemented a system to track incidents with a known Encore connection (primarily that either the victim or the offender was in the area to use the casino) but identified only three incidents that did not occur at the casino itself. Everett saw higher-than expected totals for murder, sexual assault, aggravated assault, thefts from buildings, fraud, and disorderly conduct, but in ways that were not spatially or logically influenced by Encore.
- An increase in Everett drunk driving crashes initially seemed to offer an Encore connection, with most of the incidents along Broadway Street near the casino, but a review of individual cases shows that the drivers were mostly coming from locations in Boston.

- Among increases seen in other communities, patterns worth tracking and investigating fully include:
 - A pattern of residential thefts from vehicles in the Charlestown neighborhood of Boston.
 - Increases in crashes on many state roadways in the area.
 - Increases in thefts from residences and “con-game” style frauds in Everett
- The immediate areas around the casino showed few increases in crime or calls for service. The major exception is an increase in traffic complaints in neighborhoods to the north and east of Encore, perhaps reflecting patrons parking on local streets when the garage is full.

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. A new phase began in 2018, when MGM Springfield opened in August. This is the first report on the area influenced by Encore Boston Harbor, which opened in June 2019.

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.
December 2018	Three-year analysis of Plainridge Park area.	Includes comprehensive traffic study
March 2019	Four-month analysis of MGM Springfield	Found mostly traffic changes, some property crime patterns
November 2019	Eight-month analysis of MGM Springfield	
November 2019	Four-year analysis of Plainridge Park	
November 2019	Baseline analysis of Encore Boston Harbor	
February 2020	1-year analysis of MGM Springfield	
February 2020	6-month analysis of Encore Boston Harbor	This report

May 2020	18-month analysis of MGM Springfield
September 2020	One-year analysis of Encore Boston Harbor
October 2020	Five-year analysis of Plainridge Park

Methodology

The data used in this report was collected from the contributing agencies. For Chelsea, Lynn, Malden, Melrose, Revere, and Somerville, I established an Open Database Connectivity (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.

Everett uses a records management system that is incompatible with ODBC. We had to get the support of the records management vendor to perform regular extracts from the system, but otherwise they were able to supply a full dataset. The Boston Police also did their own extraction, but unfortunately were unable to supply all the requested data tables.

After receiving 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 National Incident-Based Reporting System (NIBRS) 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. Boston is the only agency that does not currently report to the NIBRS standard, but they had comparable data elements that required only a brief translation (and they moved to a NIBRS-compatible records system late in 2019).

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

incr	Agency	IBR	Offense	dreported	street	LocType	Weapon
190925 LY	290		DESTRUCTION/VANDALISM PROPERTY	12/31/2019 23:55:56 ARLINGTON ST		RESIDENCE/HOME	
19REV- RE	99		LICENSE SUSPENDED, OP MV WITH	12/31/2019 23:48:10 STATE RD	Street	Other/Unknown	
786407 EV	999		POLICE-GENERAL REQ F	12/31/2019 23:48:00 BROADWAY ST			
190925 LY	13B		SIMPLE ASSAULT	12/31/2019 23:41:22 S COMMON ST		RESIDENCE/HOME	NONE
190925 LY	13C		INTIMIDATION	12/31/2019 23:41:22 S COMMON ST		RESIDENCE/HOME	NONE
19-361 CH	220		B&E BUILDING NIGHTTIME FOR FELONY	12/31/2019 23:23:10 CONGRESS AVE	Residence	Other/Unknown	
190925 LY	35A		DRUG/NARCOTIC VIOLATIONS	12/31/2019 22:43:50 CHESTNUT ST		HIGHWAY/ROAD/ALLEY	
190925 LY	90Z		LOCAL TRAFFIC OFFENSE	12/31/2019 22:43:50 CHESTNUT ST			
19REV- RE			VERBAL ARGUMENT	12/31/2019 22:22:10 BRADSTREET AVE	Residence	Other/Unknown	
190925 LY	90Z		LOCAL OFFENSE	12/31/2019 21:28:38 HAMPDEN PL			
19-361 CH	99		LEAVE SCENE OF PROPERTY DAMAGE	12/31/2019 21:25:10 WOODLAWN AVE	Street	Other/Unknown	
786395 EV	999		MEDICAL-OVERDOSE	12/31/2019 21:08:21 WOLCOTT ST			
190925 LY	90Z		ALL OTHER OFFENSES	12/31/2019 20:43:56 NORCROSS TER		KNIFE/CUTTING INSTRUMENT	
190925 LY	13A		AGGRAVATED ASSAULT	12/31/2019 20:43:56 NORCROSS TER	RESIDENCE/HOME	KNIFE/CUTTING INSTRUMENT	
19REV- RE	120		HOME INVASION	12/31/2019 20:40:10 NORTH SHORE RD	Residence	Handgun	
19REV- RE	13A		A&B WITH DANGEROUS WEAPON, CHILD UNDER 14	12/31/2019 20:40:10 NORTH SHORE RD	Residence	Handgun	
190056 MA	250		COUNTERFEITING/FORGERY	12/31/2019 20:05:31 EASTERN AV		DRUG STORE/HOSPITAL/DR OFF	

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

Threats to validity

There are four different records management vendors represented among the eight contributing communities. Although three of the four code crimes according to the NIBRS standard, slight variances in their approaches make some of the data inconsistent between agencies. Some of the agencies switched records systems during the 8-year

period represented by these statistics, and in each case, some immediate changes can be seen in crimes and calls for service, suggesting those changes have more to do with record-keeping than actual prevalence of social harms.

One records system, used by three of the contributing agencies, is notorious among local analysts for a data structure that makes it difficult to weed out duplications. The system also does not apply NIBRS standards correctly on the concept of “lesser included offenses,” meaning that the agencies that use this system tend to over-report their crime totals.

Finally, the Boston Police Department uses a system that does not comply with NIBRS rules. In particular, it uses the “hierarchy rule,” which counts only the most serious offense committed in each incident. Since all other agencies count multiple offenses per incident, statistics for Boston are artificially low but internally consistent.

Interpreting the statistics in this report

This report compares 6 months of activity post-Encore to the statistics *expected* for the same period had Encore not opened. All statistics, except where noted, are for the period of 1 July to 31 December.

Throughout these reports, my goal has been to present the data using the simplest statistics possible, ensuring a reader without statistical education can still interpret the results. Understanding the statistics in this report requires first understanding two simple ways of predicting future volumes of crime, calls for service, and collisions. Consider one agency, where crime has remained static over a long period:

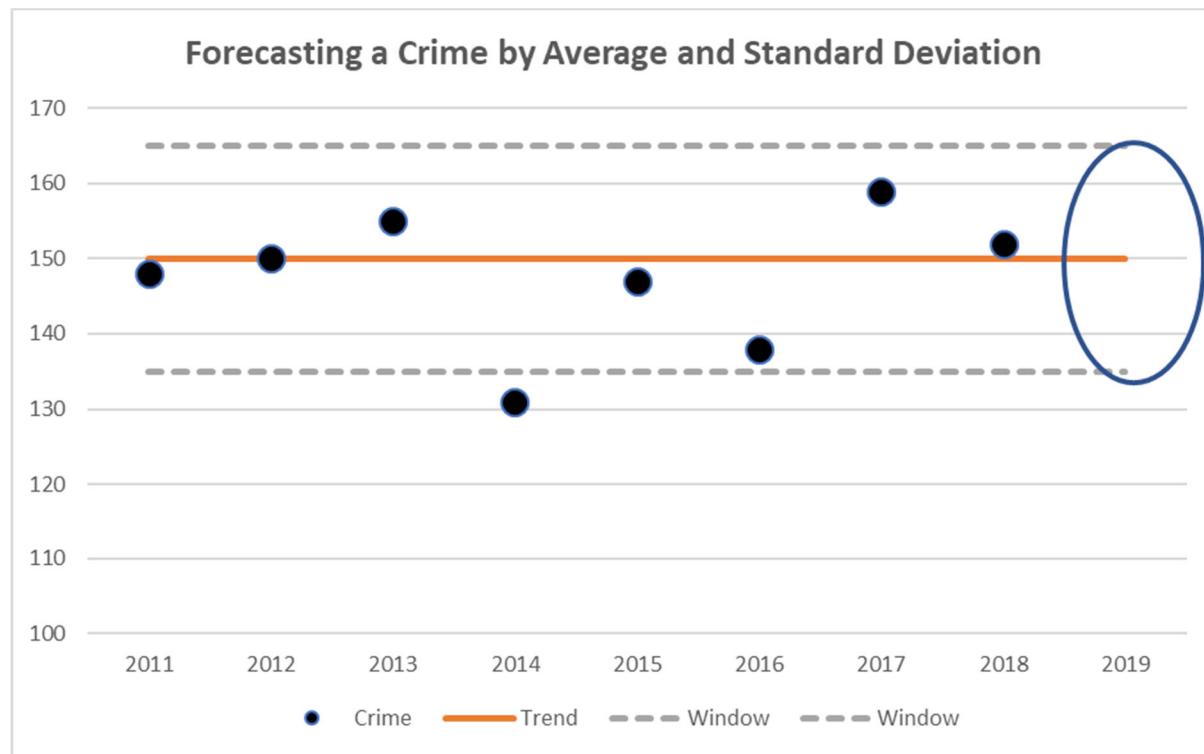


Figure 2: If a crime shows no trend over time, expected values are predicted using its average and standard deviation from the average.

In such cases, crime may vary considerably from year to year around its average, but not in a way that indicates a clear direction over the years. In such cases, we can “forecast” future activity by calculating the average (mean) of the datapoints and then using a number of standard deviations (how much the data typically varies from the average in a given year) to create upper and lower boundaries in which we would expect the data to fall a given

percentage of the time. If the data for the following year falls outside this boundary, it's a good sign that something is affecting that category other than just the normal ebb and flow of yearly crime statistics.

This particular method for creating a “prediction window” doesn’t work well when the data exhibits a clear trend over the time period in question. Consider the example in Figure 3.

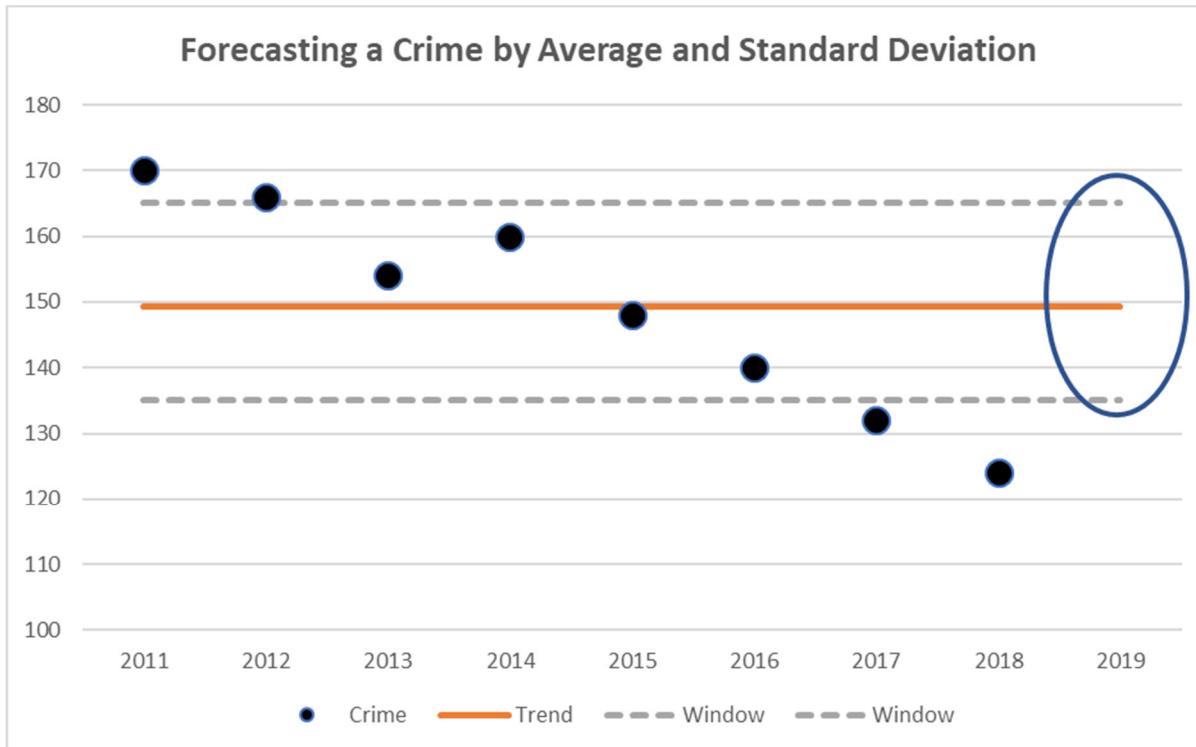


Figure 3: This method works poorly when the crime shows an increasing or decreasing trend over the period.

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. Although this method also works for static crimes, it tends to create prediction windows too large to be useful when the number of crimes is poorly correlated to the progression of years.

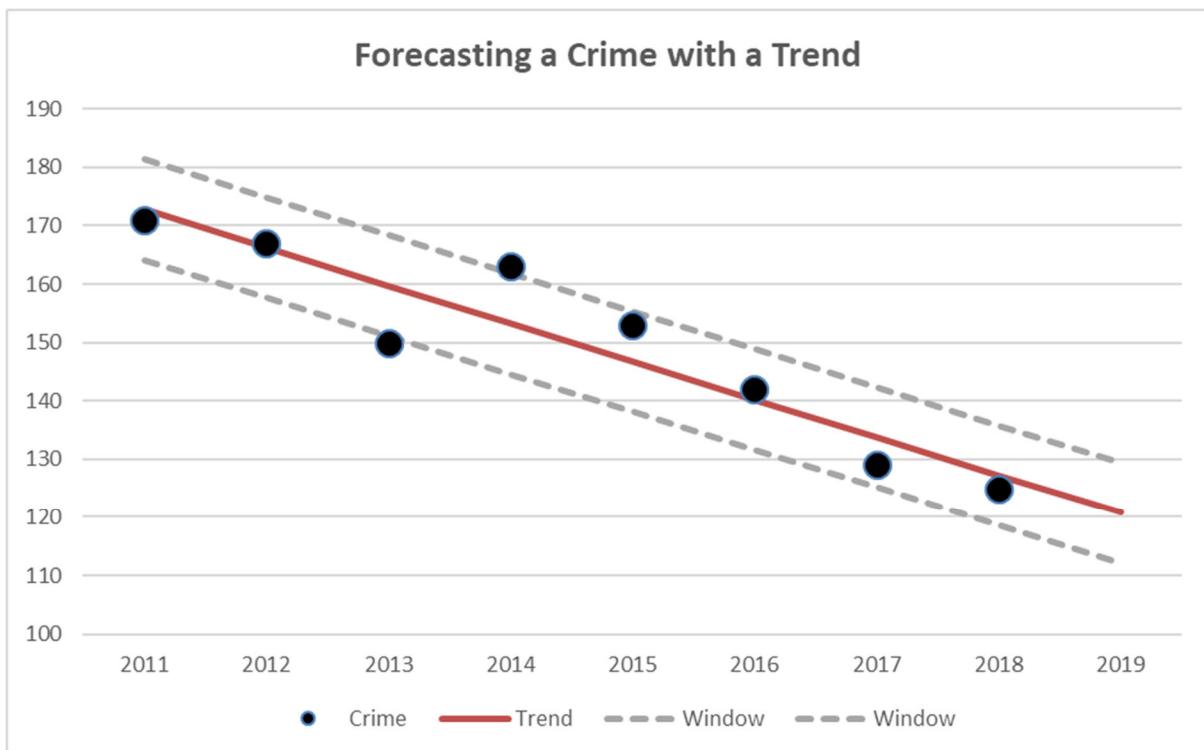


Figure 4: Trends require an alternate method of prediction that take into consideration the trendline and the normal variance around the trendline.

Thus, although most statistics offered in this report contain a “window” of predicted activity for the July–December time period, the method used to create that window varies depending on whether the category exhibited a previous trend. In both cases, the confidence window is set to 85%, meaning that barring any significant external influence, the 2019 figure had an 85% probability of falling within that window. If it does not fall within that window, it could be just a statistical fluke, but it could also be evidence of some new factor influencing the category, of which Encore is one possibility. Further analysis helps determine how likely it is that Encore is the cause, but given that this is only a six-month report, I was less interested in blaming or exonerating Encore than simply identifying the trend.

The following is a typical table in this report:

Crimes reported to Gotham, 1 July–31 December

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

The columns can be interpreted as follows:

- **Pre-Enc Avg:** The mean of the prior to Encore, for years beginning 1 July and ending 31 December.
- **Slope:** Over the same range of years, the amount by which the crime has increased or decreased each year on the crime's trendline. For instance, robbery had an average of 201, but that was roughly the midpoint in a trendline that shows a steady decline (averaging -21 incidents per year) over the period.
- **Window Type:** Designates the method used for the predictive window. If the crime shows little or no trend (i.e., a small slope compared to the mean), I used the central tendency/standard deviation method designated by a "C." If it showed a strong trend, I used the regression method designated by a "T."
- **Predictive Window:** The window in which we would have expected the 2019 figure to fall, with roughly 85% confidence. The more erratic and unpredictable the past data, the wider this window will be.
- **2019.** The actual number of that crime observed between 1 July and 31 December 2019.
- **Result:** "High" if the crime is outside its predictive window on the high end; "Low" if it's outside on the low end; "Expected" if it's within the window. Please note that even "High" and "Low" crimes are not proof of a casino influence; other factors could be at work in these communities, or 2019 could be that rare 15% of the time where natural fluctuations cause the crime to fall outside its normal bounds. When the crime is "High," I have done my best to analyze it later in the section.

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 Everett area to review the results of these analyses and receive their comments and feedback. No information about changes in the area is published without giving the local chiefs a chance to comment first. Their feedback has been incorporated into each version of the report. General agreement with these findings has been widespread, and where anyone has disagreed or offered an alternative perspective, it has been noted in this report.

About the author

Christopher W. Bruce is a professor of criminal justice at Husson University in Bangor, Maine. He is also a career crime analyst with previous service at the Cambridge Police Department (1994–2001) and the Danvers Police Department (2001–2010). He was president of the Massachusetts Association of Crime Analysts from 2000 to 2004 and president of the International Association of Crime Analysts from 2007 to 2012; he 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 (2006–2018).

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

Incidents at Encore Boston Harbor

The Massachusetts State Police and the Everett Police Department respond to incidents occurring at Encore Boston Harbor specifically, including the casino interior, exterior, parking garage, theater, and adjacent streets and walkways. 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 Everett Police and one for the Gaming Enforcement Unit at Encore. To some degree, these two tables overlap, but the specific degree of overlap cannot be determined without an incident-level comparison of the events.

Incidents at Encore Boston Harbor reported by the Gaming Enforcement Unit

The following statistics were compiled by the Gaming Enforcement Unit from July to December 2019. These numbers should be considered the most authoritative of the sources for total figures at Encore Boston Harbor; however, they might exclude some activity in the exterior reported to the Everett Police.

Crimes and other incidents, July–December 2019

Crime Type	Jul	Aug	Sep	Oct	Nov	Dec	Total
Assaults	6	10	7	6	16	12	57
Assistance to security	168	154	190	226	275	192	1205
Assistance to other agency	31	22	32	20	20	38	163
Burglary	2	0	2	0	2	0	6
Firearms offenses	1	0	0	0	1	0	2
Forgery/False Identification	7	13	17	47	26	55	165
Fugitive from justice	0	0	2	0	0	2	4
Gaming violations	13	14	19	16	23	17	102
Theft, fraud, embezzlement	14	18	17	24	22	27	122
Counterfeiting	20	6	5	7	11	12	61
Drug investigations	11	6	6	10	13	7	53
Robbery	0	0	0	0	0	0	0
Sexual assault	0	0	0	3	5	2	10
Intoxicated persons	41	42	35	88	65	71	342
Minors in casino	19	21	14	16	3	0	74
Suspicious persons	26	17	19	22	14	14	112
Medical	9	10	12	15	7	8	203
Total ejections	66	69	88	73	113	97	506
Total arrests	20	24	28	18	14	20	124
Total criminal summonses	10	18	9	9	19	24	89

Incidents at Encore Boston Harbor reported by the Everett Police Department

Crimes, July–December 2019

Crime Type	Jul	Aug	Sep	Oct	Nov	Dec	Total
Robbery	0	1	0	0	0	0	1
Aggravated Assault	2	0	4	1	1	2	10
Simple assault	2	3	4	0	1	1	11
Theft from building	1	0	0	0	1	0	2
Thefts from vehicles	2	0	0	0	0	0	2
Other theft	1	4	4	0	2	1	12
Auto theft	0	0	0	1	0	0	1
Credit card fraud	0	0	0	0	1	0	1
Stolen property	0	1	0	1	0	0	2
Drug offenses	2	0	1	0	0	0	3
Drug equipment	1	0	0	0	0	0	1
Weapon violations	1	0	0	0	0	0	1
Disorderly conduct	2	4	3	1	0	5	15
Drunk driving	0	1	2	0	1	1	5
Family offenses	0	1	0	0	1	0	2
Trespassing	5	1	1	0	1	2	10
Total violent crimes	4	4	8	1	2	3	22
Total property crimes	4	5	4	2	4	1	20
Total crimes	19	16	19	4	9	12	79

Calls for service, July–December 2019

Crime Type	Jul	Aug	Sep	Oct	Nov	Dec	Total
911 Hangup or Error	2	0	0	0	0	0	2
Abandoned Vehicle	1	2	1	0	1	2	7
Alarm	1	0	0	0	0	0	1
All Other	14	7	8	3	5	9	46
Animal Complaint	2	0	0	0	1	0	3
Assault	0	1	2	0	0	1	4
Assist Other Agency	0	2	0	0	0	0	2
Auto Theft	1	0	0	1	0	0	2
Crime Enforcement	92	63	51	53	70	46	375
Death	0	0	0	1	0	0	1
Disabled Vehicle	2	1	2	0	0	0	5
Drugs	2	0	0	0	0	0	2
Fire	3	0	1	0	1	0	5
Fraud and Forgery	0	0	0	0	1	0	1
General Service	7	4	7	2	4	8	32
Investigation	1	2	2	1	0	0	6
Liquor	2	0	1	3	1	0	7
Lost Property	1	1	0	1	0	0	3
Medical	11	6	1	4	2	6	30
Other Theft	2	3	4	0	2	2	13
OUI	0	0	0	0	1	1	2
Overdose	0	0	1	0	0	0	1

Crime Type	Jul	Aug	Sep	Oct	Nov	Dec	Total
Psychological	0	1	0	0	0	0	1
Recovered Property	0	1	0	1	0	0	2
Restraining Order Violation	0	0	0	0	1	0	1
Robbery	0	1	0	0	0	0	1
Service of Papers	0	0	0	0	0	1	1
Suspicious Activity	2	2	3	2	0	0	9
Theft from Vehicle	2	0	0	0	0	0	2
Threats or Harassment	0	1	0	0	0	0	1
Traffic Collision	3	5	4	0	4	7	23
Traffic Complaint	1	1	1	0	0	1	4
Traffic Enforcement	1	0	0	0	2	0	3
Traffic Offenses	13	10	6	8	4	6	47
Trespassing	0	1	1	0	0	0	2
Vehicle Stop	0	0	0	0	1	0	1
Warrant Service	1	0	1	0	1	0	3

*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 Encore influence Everett's statistics?

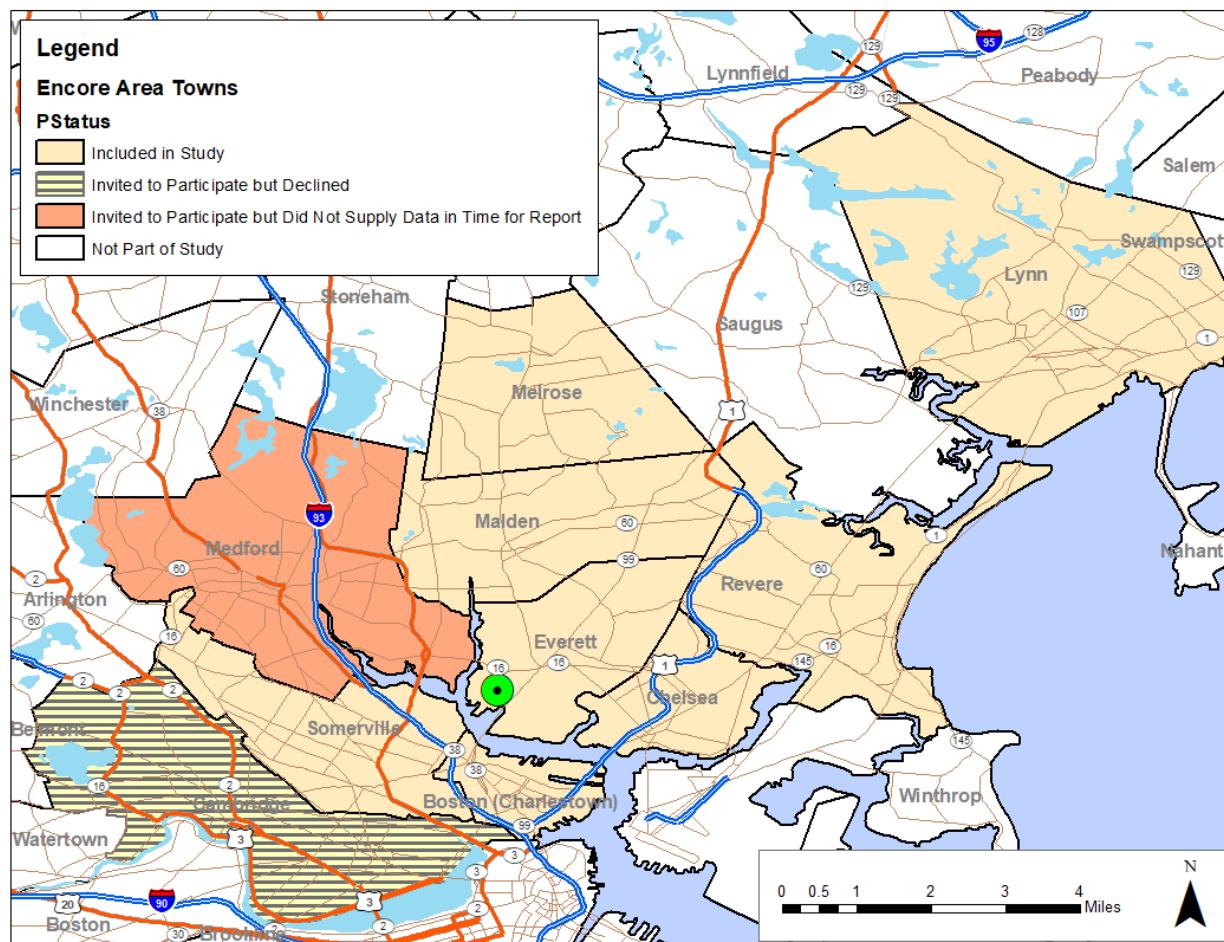
Nothing existed at 1 Broadway before Encore, except a construction site, so anything that happens at the casino specifically can be said to have directly contributed to an increase in crime in Everett, regardless if the casino influenced increases in crime in the area or not. The next sections of this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

Everett Activity, July–December 2019

Category	Number at Casino	Total Everett Number	% New Caused by Casino
Violent crime offenses	22	232	+9.5%
Property crime offenses	29	564	+5.1%
Total crime offenses	130	2,169	+6.0%
Calls for service	696	16,850	+4.1%

Thus, the casino itself has caused a modest increase in violent, property, and total crime as well as total calls for service for the Everett Police Department specifically. These figures put Encore between MGM Springfield and Plainridge Park in the percentage of new crime that can be attributed to the casino.

6-Month Comparison: All Agencies



The initial study area was limited to those agencies that signed a "surrounding community" agreement with the Massachusetts Gaming Commission: Boston, Cambridge, Lynn, Malden, Medford, Melrose, and Somerville. Together, these cities represent a population of nearly 1.3 million, although limiting the analysis of Boston to Charlestown effectively reduces that number to just over 600,000.

Of the invited communities, Cambridge declined to participate by supplying the data necessary for this analysis. Medford expressed willingness to participate but had not supplied the necessary data in time for this report; we hope to include them in future reports. The MBTA Transit Police Department was also invited to participate but had not responded in time for this report.

Although the Massachusetts State Police did contribute data for this report, its format makes it inconsistent with the local agency submissions and is thus analyzed in a later section of this report rather than in the totals offered below.

The first six month showed higher-than-expected figures for burglary, thefts from vehicles, statutory rape, and prostitution. Each of these is individually discussed below. We must note that in the cases of burglary, thefts from vehicles, and prostitution, the designations as "high" are because the crimes did not decrease as predicted by the trend for the past 7 years. All of these crimes were well below their historical averages.

Incidents reported to region, 1 July–31 December

Category	Pre-Enc	Slope	Window	Pred. Window	Jul-Dec 2019	Result
	Avg		Type			
Murder	6	0	C	3–9	10	High
Sexual Assault	166	2	C	153–179	148	Low
Kidnapping	23	0	C	19–27	24	Expected
Robbery	282	-28	T	159–208	178	Expected
Aggravated Assault	664	-24	T	509–653	590	Expected
Simple Assault	1423	-65	T	1038–1333	1260	Expected
Threats	475	-45	T	239–415	400	Expected
Arson	14	-3	T	0–15	2	Expected
Burglary	681	-108	T	186–393	396	High
Theft from Persons	52	-2	T	35–52	44	Expected
Purse-Snatching	15	-1	T	1–20	9	Expected
Shoplifting	355	1	C	304–406	260	Low
Theft from Building	276	-11	T	186–283	262	Expected
Theft from Machine	1	0	C	0–2	0	Expected
Theft from Vehicle	714	-89	T	286–466	588	High
Theft of MV Parts	43	0	C	26–60	14	Low
Other Theft	1400	-120	T	773–1151	1097	Expected
Auto Theft	452	-33	T	249–429	326	Expected
Forgery	93	-8	T	47–78	75	Expected
Fraud	310	-7	T	229–332	323	Expected
Credit Card Fraud	125	5	C	95–155	120	Expected
Identity Theft	117	0	C	88–146	91	Expected
Employee Theft	8	-1	T	1–8	5	Expected
Stolen Property	45	-5	T	16–40	40	Expected
Vandalism	1490	-132	T	863–1183	1057	Expected
Drugs	344	-20	T	216–334	262	Expected
Drug Equipment	11	0	C	8–14	13	Expected
Statutory Rape	17	0	C	13–21	41	High
Gambling	2	1	T	1–7	2	Expected
Pornography	12	1	T	9–24	20	Expected
Prostitution	29	-8	T	0–7	14	High
Weapons	141	0	C	129–153	138	Expected
Bad Checks	26	-1	C	14–38	17	Expected
Disorderly	269	-20	T	144–247	221	Expected
Drunk Driving	164	4	C	143–185	170	Expected
Family Offenses	165	-16	T	75–139	119	Expected
Liquor Laws	220	0	C	192–248	214	Expected
Runaway	73	1	C	62–84	82	Expected
Trespassing	4	-1	T	0–5	0	Expected
Violent Total	163	0	C	131–195	133	Expected
Property Total	3038	-160	T	2247–2674	2610	Expected
Total	6534	-536	T	3932–5292	4971	Expected

Murder

The good news is that most crime is expected or low in the region. The bad news is that one of the few crimes to increase is homicide. Everett and Revere both had 3, above their predicted windows, and Lynn was at the high end of theirs with 4. A review of individual cases shows a mixture of common motives, most involving people from the local area. None of them could be traced to Encore or its area influence.

Burglary

Listing burglary as “high” makes sense mathematically but grates against common sense. The 2019 figure is actually the lowest that the region has experienced since at least the 1960s. The problem is that the crime was going down so quickly, losing more than 100 incidents a year between 2012 and 2018. (The decrease during this period was a shocking 64%.) So when the category lost only 6 incidents between 2018 and 2019, it gives the appearance that something is turning it around or at least slowing it. In fact, even in the historical data the downward trend hasn’t always been steady, and we saw similar flattening between 2014 and 2015 and between 2016 and 2017. We will need more quarters of data, and contributions from control areas, to determine if anything (including Encore) is truly influencing the crime, but for now it’s best to regard it as a fluke of the predictive formula.

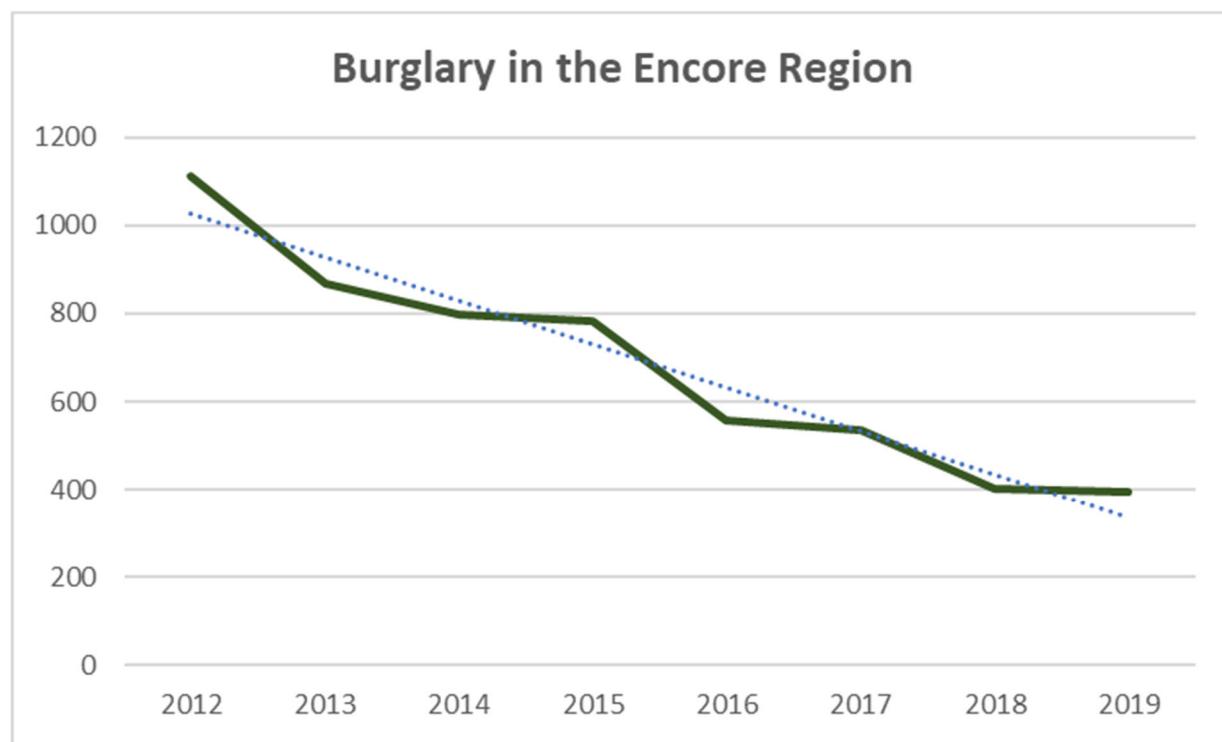


Figure 5: Burglary in the Encore region reached historic lows--just not as low as the trendline predicted.

Thefts from vehicles

To some degree, thefts from vehicles face the same problem as burglary. The 2019 figure was 43% lower than the 2012 figure and 18% lower than the 7-year average. However, the crime didn’t just flatten in 2019; it turned around and ended 33% higher than the crime’s lowest point in 2018. Of the contributing agencies, only Boston (Charlestown specifically) showed a significant increase in 2019, with a November/December pattern on residential streets. Malden and Melrose were also at the higher ends of their expected range.

Statutory rape

Chelsea accounted for almost all of the increase, with the crime discussed more there.

Prostitution

This is another crime well below its average but above the predicted trend, which had been going so sharply downward. Lynn and Malden together had 12 of the 14 incidents. Lynn's were all in a cluster on Union Street in November and early December, suggesting pro-active police activity.

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

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Abandoned Vehicle	348	-18	T	211–377	327	Expected
Disabled Vehicle	953	8	C	880–1026	891	Expected
Domestic Dispute	1482	-43	T	1147–1472	1345	Expected
General Service	4267	10	C	3948–4586	3811	Low
Gunshots	186	12	T	207–259	246	Expected
Liquor	716	-83	T	335–511	437	Expected
Lost Property	616	19	T	625–760	607	Low
Medical	16373	28	C	12951–19795	15700	Expected
Overdose	314	64	T	399–590	298	Low
Psychological	655	40	T	725–907	696	Low
Suspicious Activity	3837	-80	C	3439–4235	3062	Low
Traffic Collision	6879	190	T	6871–8404	7298	Expected
Traffic Complaint	4624	459	T	5436–7483	5806	Expected
Vagrancy	169	2	C	120–218	149	Expected

None of the selected calls for service increased for the region as a whole. Many were considerably lower than predicted.

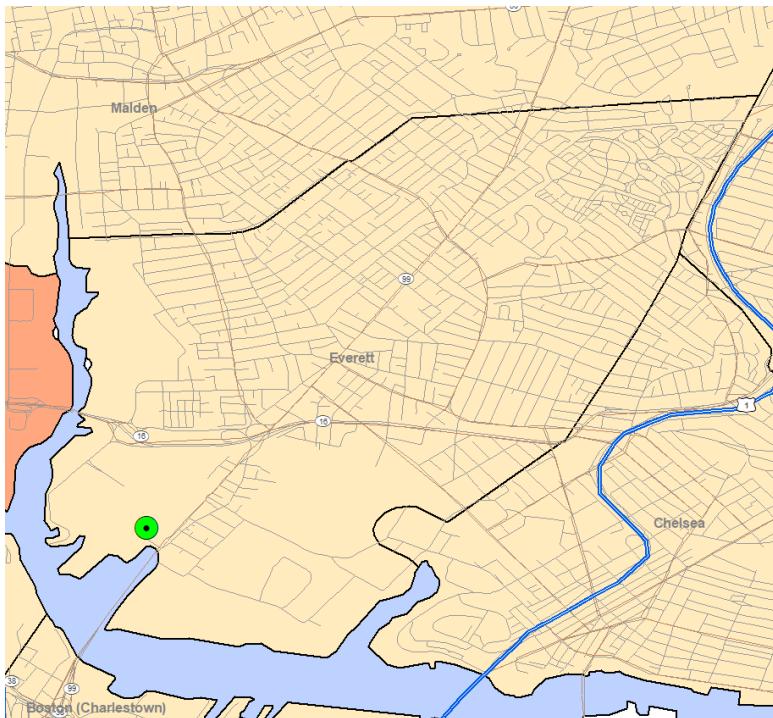
Collisions reported to region, 1 July–31 December¹

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Vehicle in Traffic	2101	38	C	1854–2348	1940	Expected
Parked Vehicle	229	-4	C	207–251	213	Expected
Pedestrian	163	8	T	157–235	162	Expected
Bicyclist	22	-1	C	13–31	16	Expected
Animal	2	0	O	0–0	1	Expected
Fixed Object	75	5	T	69–118	80	Expected
Curb/Barrier/Embankment	33	3	T	39–49	23	Low
Rollover/Jackknife	4	0	C	1–8	4	Expected
Other/Unknown	141	-10	T	83–137	104	Expected
Total	3068	62	C	2773–3384	2826	Expected

Any extra vehicle traffic in the area is not reflected (so far) in collision totals. All categories are within an expected range or lower.

¹ Individual categories do not include Somerville, but the total does. Boston is not included in this table.

6-Month Comparison: Everett



Population (est. 2018): 47,005

Area: 3.7 square miles

Police officers: 117

City center distance to Encore:
0.93 miles

Encore Boston Harbor is being built on the south border of a densely-populated suburban community. The site is a formerly unsightly industrial area on the Mystic River. The revitalization occasioned by the casino has transformed and is likely to continue transforming the waterfront on both sides of the river, both creating opportunities for crime and providing natural guardians against it.

In the first six months of Encore's operation, Everett has seen some increases in crimes and calls for service that have a logical connection to a casino; that is, you would expect the crimes to increase with extra people in a community, or they would earn gambling-motivated offenders quick cash. However, few of them have any clear *spatial* connection, and statistics later in this report show that the immediate Encore area had few changes.

Shortly before Encore opened, Everett implemented a coding system to flag incidents that had a known relationship with Encore, either because the victim or offender was in the area to use the casino. (Note that in most cases, the offender is unknown, so the coding system will fail in such incidents.) In the six months post-Encore, the only incidents that the agency recorded not at the casino itself were two simple assaults and a stolen cell phone. Both of the assaults involved male patrons who had recently left the casino before getting into fights with other men. Assault did not increase in general for the city in the post-Encore period.

The Everett Police Department's two crime analysts are vital partners in this project. The senior analyst has worked for the agency for more than 10 years. We will rely on her judgment to analyze many of the increases and determine the probability of a casino relationship.

Crimes in Everett

Category	Pre-Enc	Slope	Window	Pred. Window	Jul-Dec	Result
	Avg		Type		2019	
Murder	1	0	C	0-1	3	High
Sexual Assault	11	0	C	9-13	17	High
Kidnapping	2	0	C	0-4	1	Expected
Robbery	22	-3	T	11-27	11	Expected
Aggravated Assault	47	3	T	51-65	70	High
Simple Assault	68	-14	T	24-81	61	Expected
Threats	46	-3	C	32-60	47	Expected
Arson	1	0	C	0-1	1	Expected
Burglary	79	-7	T	44-96	53	Expected
Theft from Persons	1	0	T	0-2	2	Expected
Purse-Snatching	2	0	C	1-4	2	Expected
Shoplifting	54	0	C	42-66	50	Expected
Theft from Building	17	-2	T	9-17	23	High
Theft from Machine	0	0	T	0-3	0	Expected
Theft from Vehicle	93	-11	T	43-98	54	Expected
Theft of MV Parts	4	-1	T	1-5	2	Expected
Other Theft	132	-2	C	117-147	110	Low
Auto Theft	48	-5	T	29-48	44	Expected
Forgery	7	-1	C	3-14	5	Expected
Fraud	14	1	C	6-22	23	High
Credit Card Fraud	32	2	C	16-48	35	Expected
Identity Theft	12	-5	T	1-15	0	Low
Employee Theft	1	0	C	0-2	0	Expected
Stolen Property	7	-1	C	4-10	6	Expected
Vandalism	153	-8	T	101-145	104	Expected
Drugs	26	1	C	20-32	24	Expected
Drug Equipment	10	0	C	6-14	9	Expected
Statutory Rape	1	0	C	0-2	0	Expected
Gambling	0	0	T	0-1	0	Expected
Pornography	1	0	C	0-3	2	Expected
Prostitution	1	0	C	0-3	0	Expected
Weapons	11	3	T	8-31	12	Expected
Bad Checks	9	0	C	3-16	13	Expected
Disorderly	10	1	C	3-18	21	High
Drunk Driving	13	1	C	8-18	35	High
Family Offenses	66	12	T	58-120	78	Expected
Liquor Laws	1	0	C	0-3	1	Expected
Runaway	3	0	C	0-6	0	Expected
Trespassing	6	0	C	3-9	7	Expected
Violent Total	197	-17	T	125-191	210	High
Property Total	657	-38	T	442-596	514	Expected
Total	1012	-33	T	725-1023	926	Expected

Everett's trend of violent crime reduction reversed in 2019, bringing it back to numbers not seen since 2013, even as its property and total crime numbers continued their decreasing trend.

Murder

Everett's three murders during this period were a 42-year-old man shot outside a hookah bar in September, a 26-year-old man shot on the street in October, and the hit-and-run death of a 59-year-old resident in October. None had any casino relationship nor could have plausibly been influenced by the casino's presence.

Sexual Assault

We will need assistance from the Everett Police to analyze the sexual assault increase. Most of the incidents seem to be at residences involving victims and offenders from Everett or the immediate local area.

Aggravated Assault

Aggravated assault was well above the predicted trend for the 6-month period and about 55% higher than average. Almost all of the increase came in September and December, both at residences and on the street. There are a handful of incidents in the periphery of the casino, but most are above Route 16 in the north half of town.

Thefts from Buildings

Most of the increase is at residences, and one particular cluster in the northeast section of town, in December, may be related in a pattern.

Fraud

Everett saw a near record-high number of "con game"-style frauds in the last half of 2019, most at residences (which often suggests online fraud). When suspects are known, they seem to be from the Chelsea/Everett/Revere area.

Disorderly Conduct

A modest increase in disorderly conduct arrests is scattered across the northern part of town and does not seem geographically associated with the casino.

Drunk Driving

Unlike disorderly conduct, the increase in drunk driving arrests *does* seem to be spatially associated with Encore. Fifteen of the arrests alone happened on Broadway, most between 22:00 and 03:00. However, a review of individual cases shows that the drunk drivers were coming from other locations, mostly in Boston, and just happened to be driving on Broadway near Encore when stopped (extra law enforcement presence in the area may be related). We will continue to monitor this crime, but for now the spatial relationship seems to be coincidental.

Selected calls for service in Everett

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Abandoned Vehicle	232	-20	T	126–233	237	High
Disabled Vehicle	66	3	T	64–94	74	Expected
Domestic Dispute	17	-1	C	13–21	26	High
General Service	771	-61	T	458–684	527	Expected
Gunshots	15	3	T	16–31	20	Expected
Liquor	8	0	C	3–13	10	Expected
Lost Property	69	10	T	76–136	60	Low
Medical	1082	-62	T	746–927	1081	High
Overdose	45	6	T	42–86	48	Expected
Psychological	20	3	T	22–44	25	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Suspicious Activity	445	-15	T	295–472	413	Expected
Traffic Collision	623	9	C	566–680	660	Expected
Traffic Complaint	555	15	T	571–658	740	High

Everett had more call-for-service increases than most other cities. As the host city for the casino, it would make sense for it to bear the brunt of any increases associated with population volume. Most of the increase is seen above Route 16 rather than south of it but otherwise the types of calls to increase make sense: **abandoned vehicles** brought from out of town, **medical aids**, and **parking complaints** on local roads.

Collisions in Everett

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Vehicle in Traffic	95	6	T	92–145	130	Expected
Parked Vehicle	32	2	T	27–50	49	Expected
Pedestrian	11	-1	C	7–15	14	Expected
Bicyclist	4	0	C	2–6	6	Expected
Animal	0	0	0	0–0	0	Expected
Fixed Object	15	2	T	15–25	15	Expected
Curb/Barrier/Embankment	3	1	T	2–5	7	High
Rollover/Jackknife	1	0	C	0–2	0	Expected
Other/Unknown	6	0	C	4–8	8	Expected
Total	168	10	T	158–243	229	Expected

Everett's collision total was a bit higher than average, but within the expected range given the upward trend that the city has seen in collisions this decade.

6-month analysis: Boston/Charlestown



Population (est. 2016): 17,201

Area: 24.2 square miles

Police officers: 2,122 (city wide)

City center distance to Encore:
1.87 square miles

As the capital and the largest city in the Commonwealth, Boston gives its name to the casino and supplies much of its traffic, both residents and visitors, arriving via Logan Airport shuttles, the MBTA, vehicles, or ferries from Long Wharf and the World Trade Center.

Because any casino influence on the totality of the city would likely be undetectable amidst the normal volume of crimes and calls for service that this city generates, analysis of changes is largely confined to Charlestown, Boston Police District A-15, Boston's oldest neighborhood. This detached area is north of the Charles River, west of the main channel of Boston Harbor, south of the Mystic River, and east of Route 93. It contains Bunker Hill, the U.S.S. Constitution, several waterfront parks, two colleges, and about 17,000 of the city's 700,000 residents.

In the six months post-Encore, violent crime and total crime were higher than expected in the neighborhood, largely because of increases not experienced by other communities. These are discussed below. Because of a change to a new records management system, crime data was received from Boston very late in this report and could not be analyzed as fully as the other agencies' data.

The Mystic River serves as a practical barrier to activity spilling into the neighborhood from Encore except in a few geographically-concentrated ways. Changes in Charlestown may be reflected in extra traffic along Rutherford Avenue and Alford Street, as well as increased usage of tourist destinations within the area and facilities near Exit 28 off I-93. The neighborhood's few hotels might see extra occupancy.

Although not in Charlestown and thus not part of these statistics, we will also be working with the Boston Police to determine if crime or calls for service increase in reporting areas surrounding Long Wharf, the World Trade Center, and the Logan Airport pier, where water taxi and ferry traffic take visitors to and from the casino.

Crimes in Boston/Charlestown²

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Murder	0	0	C	0–1	0	Expected
Sexual Assault	4	0	C	1–7	1	Expected
Kidnapping	0	0	C	0–0	0	Expected
Robbery	11	-1	C	7–15	2	Low
Aggravated Assault	26	-1	C	18–34	34	Expected
Simple Assault	64	-2	T	40–69	71	High
Threats	31	-5	T	0–27	36	High
Arson	0	0	C	0–0	0	Expected
Burglary	21	-3	T	0–30	8	Expected
Theft from Persons	1	0	C	0–2	0	Expected
Purse-Snatching	0	0	C	0–1	0	Expected
Shoplifting	10	1	C	3–17	6	Expected
Theft from Building	31	0	C	26–36	24	Low
Theft from Machine	0	0	T	0–0	0	Expected
Theft from Vehicle	45	-7	T	0–40	59	High
Theft of MV Parts	10	-2	T	0–10	8	Expected
Other Theft	41	-1	C	30–52	46	Expected
Auto Theft	16	-2	T	4–15	17	High
Forgery	2	0	C	0–4	2	Expected
Fraud	19	-3	T	0–18	24	High
Credit Card Fraud	5	2	T	5–16	6	Expected
Identity Theft	3	2	T	6–13	2	Low
Employee Theft	1	0	C	0–3	3	Expected
Stolen Property	2	-1	T	0–2	1	Expected
Vandalism	65	-5	T	30–65	58	Expected
Drugs	34	3	T	28–66	26	Low
Drug Equipment	0	0	C	0–0	0	Expected
Statutory Rape	0	0	C	0–0	0	Expected
Gambling	0	0	C	0–0	0	Expected
Pornography	1	0	C	0–2	0	Expected
Prostitution	0	0	C	0–0	0	Expected
Weapons	4	-1	C	0–8	2	Expected
Bad Checks	0	0	C	0–0	0	Expected
Disorderly	5	-1	T	0–7	4	Expected
Drunk Driving	2	0	T	0–3	1	Expected
Drunkenness	0	0	T	0–0	0	Expected
Family Offenses	14	1	T	12–24	18	Expected

² Prior to 2019, Boston's records management system did not follow NIBRS standards and only recorded the most serious offense code with each incident rather than each separate offense. Hence, while the statistics here are internally consistent, they are not directly comparable with other agencies, with the disparity getting more significant the further one goes down the list of crimes.

Category	Pre-Enc	Slope	Window	Pred.	Jul-Dec	Result
	Avg		Type	Window	2019	
Liquor Laws	1	0	T	0-1	0	Expected
Runaway	0	0	C	0-0	0	Expected
Trespassing	6	-1	T	0-7	4	Expected
Violent Total	135	-7	T	73-138	144	High
Property Total	306	-16	T	191-300	290	Expected
Total	457	-27	T	389-453	463	High

Simple Assault

Charlestown is the only contributing area to see an increase in simple assaults. The increase is at residential properties, suggesting the assaults are representative of domestic violence. The increase is very slight, however, and it's too early to make much of it as a trend.

Threats

No patterns could be seen in the increase in threats and intimidation. It crossed all months, addresses, and location types. There were no observed factors connecting the increase to Encore.

Thefts from Vehicles

November and December brought a pattern of thefts from cars to the residential streets in the neighborhood, with report times suggesting largely daytime occurrences, particularly on Fridays.



Figure 6: A November-December pattern of thefts from cars affected Charlestown's residential neighborhoods.

Auto theft

Auto theft increased in September and October, mostly on weekdays during the day, mostly around Monument Square.

Fraud

The increase in fraud starts in September, shortly after the agency switched to a new records system. Concurrent decreases during the period in credit card fraud and identity theft suggest that the new system may simply have improved (or just changed) reporting categories for certain crimes.

Selected calls for service in Boston/Charlestown

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Abandoned Vehicle	6	-4	T	0–7	0	Expected
General Service	22	4	T	21–54	32	Expected
Gunshots	12	-2	T	2–15	3	Expected
Liquor	4	-2	T	0–3	0	Expected
Lost Property	41	2	C	30–52	56	High
Medical	27	0	C	23–31	33	High
Overdose	15	0	C	8–22	8	Expected
Psychological	33	0	C	26–40	52	High
Suspicious Activity	57	-19	T	12–35	22	Expected
Traffic Collision	337	24	T	378–485	395	Expected

Charlestown's biggest increase in calls was in the "psychological" category, representing a bump in "emotionally disturbed persons," particularly in November and December. Lost property and medical aids—two volume-driven call types—were also above average. There weren't any spatial patterns.

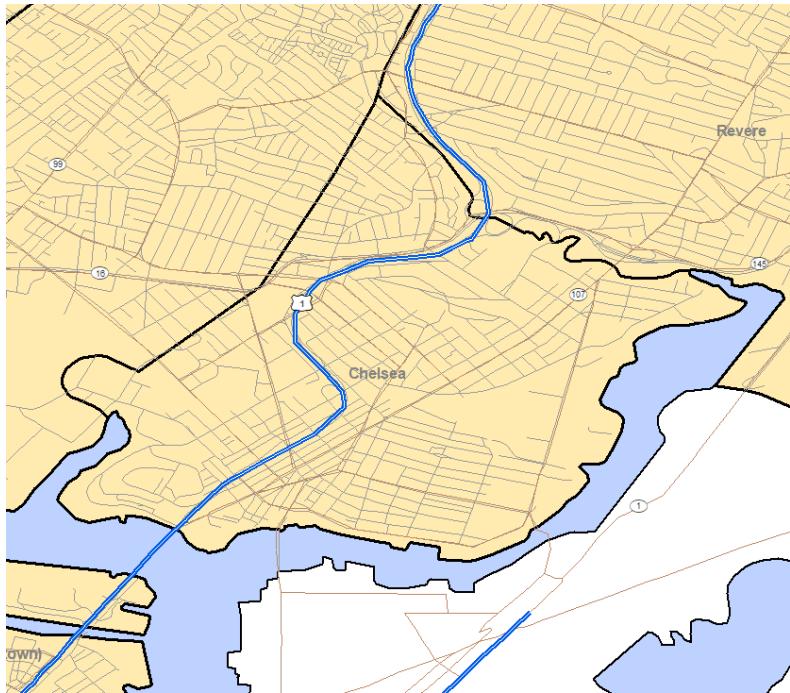
Collisions in Boston/Charlestown

Unfortunately, the Boston Police Department does not have electronic crash report data beyond what is recorded in the computer-aided dispatch (CAD) system and thus listed above under calls for service. Until this situation changes or we are able to get crash report data from the state, we will be unable to note changes in Charlestown-area crashes.

Other questions

1. **Did calls for service increase along Rutherford Avenue and Alford Street, feeding into the casino area?** The Boston Police made more vehicle stops along these streets (57 against an average of 42 and a predicted window of 30–54), but otherwise no. Traffic collisions were at 75 against an average of 67 and a predicted window of 69–97. No other call type was reported along this street in significant volume.
2. **Did calls for service at hotels increase in Charlestown?** Charlestown only has four hotels, and in a six-month period, the collectively have 30–50 calls for service. There were 36 in the final 6 months of 2019. None of the individual categories are high enough to show a significant change yet.

6-month analysis: Chelsea



Population (est. 2018): 40,974

Area: 2.5 square miles

Police officers: 110

City center distance to Encore:
1.83 miles

Chelsea is a diverse working-class community. The smallest city in the Commonwealth, and the second densely-populated, Chelsea is one of only three Massachusetts cities with a Hispanic-majority population. It has bounded back from crippling crime rates and near-bankruptcy in the 1990s and has enjoyed significant economic growth and gentrification in the past 15 years. The city's UCR Part 1 violent crime rate fell 59% between 2008 and 2018.

The city is physically close to Encore, and visitors coming from eastern Massachusetts or even Logan Airport might pass through the city's boundaries. Extra tourist traffic to Encore might bring extra visitors to its hotel and restaurant cluster off Everett Avenue. There have been no signs of any casino-related increases in the first six months, however.

Chelsea has a full-time crime analyst who is able to assist with the analysis of new patterns and trends in the city.

Crimes in Chelsea

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Murder	1	0	C	0-3	0	Expected
Sexual Assault	31	1	C	23-39	28	Expected
Kidnapping	7	0	C	3-11	6	Expected
Robbery	81	-13	T	26-51	40	Expected
Aggravated Assault	131	-14	T	77-118	125	High
Simple Assault	351	-14	T	241-348	289	Expected
Threats	166	-14	T	96-161	127	Expected
Arson	2	0	C	0-4	0	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Burglary	87	-17	T	34–57	46	Expected
Theft from Persons	13	-2	T	3–11	2	Low
Purse-Snatching	6	-1	C	1–14	4	Expected
Shoplifting	69	-3	C	52–86	30	Low
Theft from Building	80	-3	C	51–109	53	Expected
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	95	-15	T	40–86	68	Expected
Theft of MV Parts	19	4	C	2–38	0	Low
Other Theft	86	-32	T	22–77	68	Expected
Auto Theft	68	-11	T	29–55	41	Expected
Forgery	13	-1	T	6–14	10	Expected
Fraud	47	-2	C	33–61	27	Low
Credit Card Fraud	15	-1	C	10–20	1	Low
Identity Theft	29	-3	T	16–31	22	Expected
Employee Theft	2	0	T	1–4	0	Low
Stolen Property	18	-1	C	12–22	15	Expected
Vandalism	287	-39	T	135–180	167	Expected
Drugs	48	-6	T	18–45	30	Expected
Drug Equipment	0	0	T	0–1	1	Expected
Statutory Rape	3	1	T	1–9	22	High
Gambling	1	0	T	0–5	0	Expected
Pornography	2	1	C	0–5	4	Expected
Prostitution	7	-1	C	2–12	0	Low
Weapons	36	-3	T	16–41	27	Expected
Bad Checks	6	0	C	3–9	0	Low
Disorderly	49	-7	T	21–41	31	Expected
Drunk Driving	25	0	C	14–36	22	Expected
Drunkenness	130	-9	T	86–131	99	Expected
Family Offenses	0	0	C	0–1	0	Expected
Liquor Laws	28	1	C	19–37	33	Expected
Runaway	1	0	C	0–3	0	Expected
Trespassing	35	-2	C	22–48	21	Low
Violent Total	768	-54	T	485–620	615	Expected
Property Total	935	-128	T	453–506	554	High
Total	2075	-207	T	1111–2014	1459	Expected

Chelsea's property crime total has dropped so much in the past 8 years that the 2019 figure registers as above the predicted window even though it's a record low for the agency; it simply didn't drop as much as the trendline predicted. This is an oddity with this agency, but we can largely ignore the totals and focus on the individual crime categories.

Aggravated Assault

Aggravated assaults in 2019 were lower than average but above what the decreasing trend predicted. The bulk of the reversal seems to be at residences (as opposed to street violence), suggesting an increase in domestic-related

crimes, although we did not see a comparable increase in domestic disputes and domestic simple assaults. "Personal" weapons (hands and feet) and blunt objects dominate the increase in terms of weapon type.

Statutory Rape

This category showed a massive increase in the second half of 2019, but it's impossible to know what's happening without access to the full reports. Almost all of the incidents are at residences, with a few duplicate addresses.

Selected calls for service in Chelsea

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Abandoned Vehicle	29	0	C	17–41	14	Low
Disabled Vehicle	83	3	T	81–109	79	Low
Domestic Dispute	338	-23	T	211–277	268	Expected
General Service	415	-19	C	264–566	433	Expected
Gunshots	35	0	C	26–44	69	High
Liquor	52	5	T	57–81	38	Low
Lost Property	16	2	T	19–26	20	Expected
Medical	589	-6	C	417–761	400	Low
Psychological	163	9	T	155–244	210	Expected
Suspicious Activity	736	-48	T	369–812	349	Low
Traffic Collision	730	28	T	787–897	856	Expected
Traffic Complaint	541	91	T	644–1162	724	Expected

Gunshots

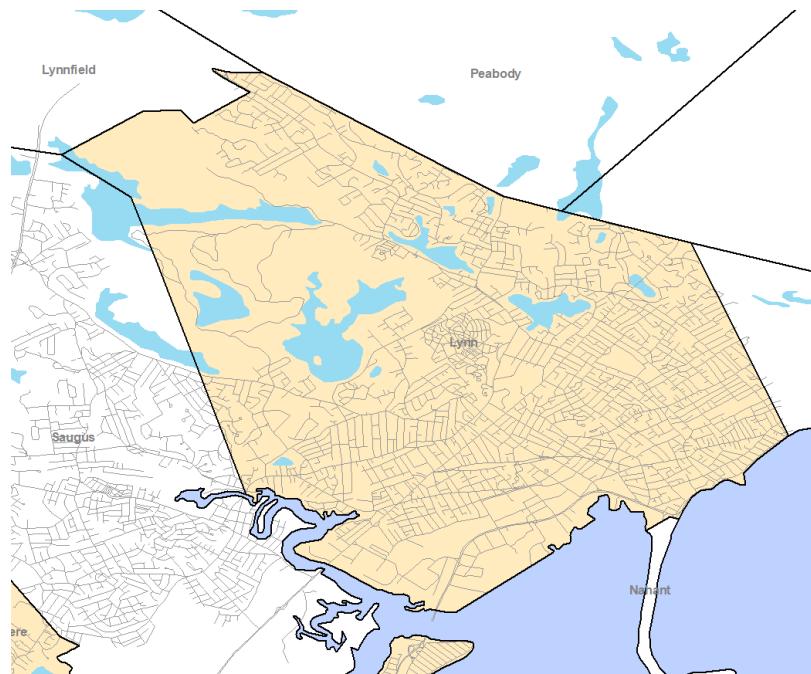
Gunshot reports for the last half of 2019 were nearly double the city's average, but the increase came entirely from automatic notices from the city's ShotSpotter gunshot detection service, which suggests an expansion of that service rather than an increase in the number of actual gunshots fired. If those are removed from consideration, the city had only 8 reports of gunshots from an average of 12.4.

Collisions in Chelsea

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Vehicle in Traffic	223	8	C	179–267	257	Expected
Parked Vehicle	109	-10	T	60–91	64	Expected
Pedestrian	26	-1	C	18–34	27	Expected
Bicyclist	6	-1	C	2–10	2	Expected
Animal	0	0	o	0–0	0	Expected
Fixed Object	22	1	C	13–31	17	Expected
Curb/Barrier/Embankment	7	1	C	2–12	2	Expected
Rollover/Jackknife	1	0	C	0–2	0	Expected
Other/Unknown	6	0	C	2–10	2	Expected
Total	400	-2	C	372–428	371	Low

Total collision reports in Chelsea were the lowest in the past decade. Any extra traffic going through the city to Encore is not being reflected in reportable crashes.

6-month analysis: Lynn



Population (est. 2018): 94,558

Area: 13.5 square miles

Police officers: 161

City center distance to Encore:
7.62 miles

Lynn is the city farthest removed from Encore Boston Harbor. Although its storied past as the “city of sin” has been tempered by crime decreases over the past two decades, its large population generates enough activity that any changes brought by Encore Boston Harbor will be difficult to detect.

Lynn has no travel routes to Encore excepting those that its own residents will use. A couple of bed-and-breakfasts make up its only lodging. It may see an increase in visitation from a small percentage of Encore visitors interested in the city’s growing arts culture. So far, however, most activity has been low, and no changes are attributable to Encore.

Crimes in Lynn

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Murder	2	0	C	0-4	4	Expected
Sexual Assault	64	0	C	54-74	55	Expected
Kidnapping	6	0	C	3-9	5	Expected
Robbery	92	-2	C	79-105	68	Low
Aggravated Assault	228	-9	T	156-233	157	Expected
Simple Assault	425	-20	T	262-454	388	Expected
Threats	48	1	C	39-57	51	Expected
Arson	4	0	C	1-7	0	Low
Burglary	215	-32	T	80-127	127	Expected
Theft from Persons	24	0	C	15-33	26	Expected
Purse-Snatching	0	0	C	0-0	0	Expected
Shoplifting	74	-5	C	46-102	51	Expected
Theft from Building	30	-3	T	14-38	47	High

Category	Pre-Enc	Slope	Window	Pred.	Jul-Dec	Result
	Avg		Type	Window	2019	
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	184	-17	T	105-172	131	Expected
Theft of MV Parts	7	-2	T	2-8	2	Expected
Other Theft	442	-34	T	242-417	311	Expected
Auto Theft	137	-3	C	92-182	81	Low
Forgery	28	-5	T	11-16	15	Expected
Fraud	74	-4	T	50-77	67	Expected
Credit Card Fraud	29	0	C	18-40	41	High
Identity Theft	0	0	C	0-0	0	Expected
Employee Theft	1	0	C	0-1	0	Expected
Stolen Property	0	0	T	0-2	2	Expected
Vandalism	468	-39	T	262-441	299	Expected
Drugs	133	-9	T	66-156	107	Expected
Drug Equipment	0	0	C	0-0	0	Expected
Statutory Rape	4	0	C	1-8	8	Expected
Gambling	1	0	C	0-2	0	Expected
Pornography	2	1	T	1-9	3	Expected
Prostitution	18	-7	T	1-10	7	Expected
Weapons	44	1	C	35-53	48	Expected
Bad Checks	0	0	C	0-0	0	Expected
Disorderly	91	-6	T	40-110	74	Expected
Drunk Driving	56	2	C	44-68	64	Expected
Drunkenness	0	0	C	0-0	0	Expected
Family Offenses	83	-7	T	50-101	64	Expected
Liquor Laws	18	1	C	13-28	27	Expected
Runaway	0	0	C	0-0	0	Expected
Trespassing	62	-1	C	42-82	46	Expected
Violent Total	865	-30	T	593-936	728	Expected
Property Total	1718	-144	T	943-1469	1200	Expected
Total Crimes	3094	-200	T	1822-3221	2376	Expected

Overall crime was well within expected ranges for Lynn, generally continuing the trend of decreasing crime. A few exceptions are analyzed below.

Thefts from buildings

There are two potential patterns at work in this increase: thefts from residences in East Lynn and thefts from restaurants in September and October. Case numbers were supplied to the Lynn Police for further review, but we had not received a response in time for this final report

Credit card fraud

Credit card fraud increased about 40% from average during this period, but I can't find any patterns within the data. Incidents are scattered across town, throughout the six month period, at a variety of location types. A good portion are at residences, suggesting online fraud.

Selected calls for service in Lynn

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Disabled Vehicle	421	-8	C	354–488	319	Low
Domestic Dispute	411	-37	T	213–353	292	Expected
General Service	415	2	C	369–461	381	Expected
Gunshots	86	1	C	79–93	78	Low
Liquor	270	-29	T	123–219	177	Expected
Lost Property	206	0	C	181–231	181	Expected
Medical	4466	95	T	4579–5115	4670	Expected
Overdose	144	34	T	233–303	191	Low
Psychological	199	11	T	218–271	141	Low
Suspicious Activity	845	-30	T	545–903	689	Expected
Traffic Collision	1667	50	T	1716–2016	1663	Low
Traffic Complaint	1541	74	T	1383–2290	1451	Expected
Vagrancy	88	1	C	74–102	107	High
Traffic Complaint	224	12	T	241–304	305	High

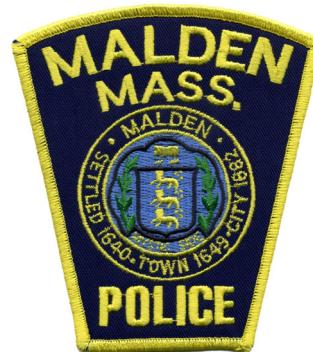
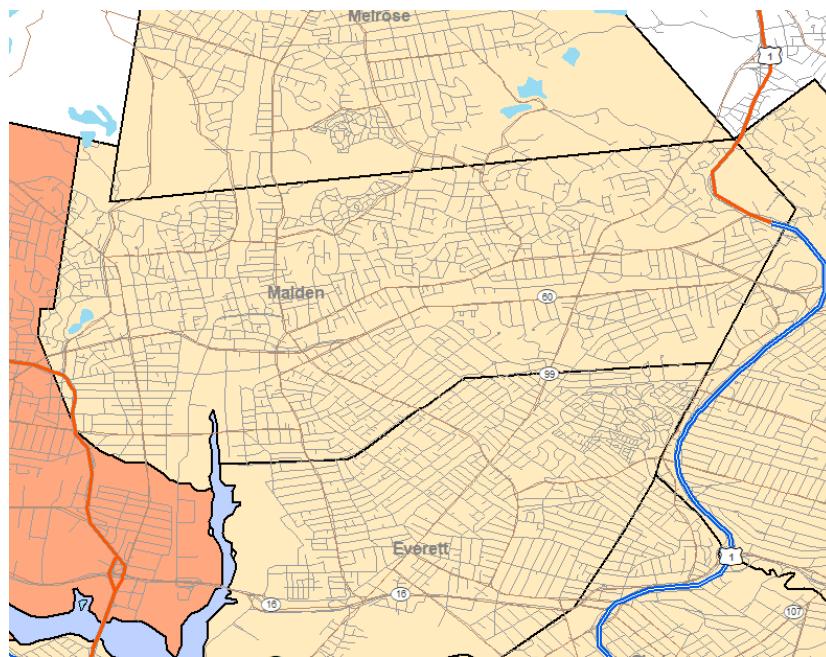
Lynn's only increases this period were for **vagrancy** and **traffic complaints**. Reports of panhandling increased in particular on Boston Street and State Street, and extra parking complaints are spread across the city.

Collisions in Lynn

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Vehicle in Traffic	1156	-7	C	960–1352	883	Low
Parked Vehicle	5	0	C	3–7	3	Expected
Pedestrian	75	8	T	74–135	78	Expected
Bicyclist	2	0	C	0–5	4	Expected
Animal	1	0	C	0–2	1	Expected
Fixed Object	0	0	C	0–0	0	Expected
Curb/Barrier/Embankment	0	0	C	0–0	0	Expected
Rollover/Jackknife	0	00	C	0–0	0	Expected
Other/Unknown	75	-10	T	32–71	28	Low
Total	1314	-9	C	1093–1535	997	Low

Lynn's crash totals in the last half of 2019 were the lowest in at least 9 years, certainly showing no evidence of being affected by extra traffic to and from Encore. This makes sense, as the only travel routes that go through the city would have to originate within the city.

6-month analysis: Malden



Population (est. 2016): 61,469

Area: 5.1 square miles

Police officers: 102

City center distance to Encore:
2.28 miles

Bordering Everett to the north, Malden has one of the lower crime rates (for both violent crime and property crime) among the jurisdictions in this study. With the exception of a small part of U.S. Route 1 (a stretch mostly clear of businesses except a single liquor store), the city does not have many significant auto travel routes leading to Encore. However, the casino does operate a free shuttle out of Malden Center, which may increase foot and vehicle traffic to the businesses in the region. So far, most categories analyzed below show normal or decreased activity.

Crimes in Malden

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Murder	0	0	C	0–1	0	Expected
Sexual Assault	11	1	C	3–19	12	Expected
Kidnapping	2	1	T	2–8	7	Expected
Robbery	29	-3	T	16–27	13	Low
Aggravated Assault	69	-1	C	51–87	54	Expected
Simple Assault	176	-9	T	111–190	144	Expected
Threats	43	-14	T	12–33	19	Expected
Arson	1	-1	T	0–2	0	Expected
Burglary	80	-17	T	22–41	48	High
Theft from Persons	8	0	C	5–11	6	Expected
Purse-Snatching	0	0	T	0–0	0	Expected
Shoplifting	51	-3	C	31–71	42	Expected
Theft from Building	12	1	C	6–18	17	Expected
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	89	-8	C	43–135	104	Expected
Theft of MV Parts	2	0	C	0–4	0	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Other Theft	186	-13	T	104–210	162	Expected
Auto Theft	49	-4	T	26–50	56	High
Forgery	15	-3	T	7–14	9	Expected
Fraud	31	1	C	25–37	28	Expected
Credit Card Fraud	9	2	T	10–21	4	Low
Identity Theft	0	0	C	0–1	0	Expected
Employee Theft	0	0	C	0–1	0	Expected
Stolen Property	0	0	C	0–0	0	Expected
Vandalism	152	-9	T	97–147	134	Expected
Drugs	25	-3	T	12–24	9	Low
Drug Equipment	0	0	C	0–0	0	Expected
Statutory Rape	1	0	C	0–2	0	Expected
Gambling	0	0	C	0–0	0	Expected
Pornography	1	0	C	0–2	2	Expected
Prostitution	2	0	C	0–6	5	Expected
Weapons	10	0	C	6–14	6	Expected
Bad Checks	0	0	T	0–1	0	Expected
Disorderly	28	-1	C	15–41	15	Expected
Drunk Driving	9	-2	T	3–7	3	Expected
Drunkenness	0	0	C	0–0	0	Expected
Family Offenses	33	-3	T	13–38	32	Expected
Liquor Laws	2	0	C	0–6	0	Expected
Runaway	0	0	C	0–0	0	Expected
Trespassing	24	3	T	18–41	25	Expected
Violent Total	330	-25	T	195–365	249	Expected
Property Total	686	-54	T	398–615	610	Expected
Total Crimes	1150	-86	T	638–1310	956	Expected

Malden was the only city to show an increase in a couple classic categories of property crime.

Burglary

Malden's burglary "High" is a result of the same mathematics as previously reported for the entire region. We will watch for a reversal of the previous downward trend, but for now it is important to note that the crime is well below average for the city.

Auto theft

There was a group of three at the Hertz franchise on a single day in October, but most of the increase is at residential driveways overnight. There was a particular concentration in July and August.

Selected calls for service in Malden

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Disabled Vehicle	81	-1	C	65–97	70	Expected
Domestic Dispute	62	1	C	44–80	69	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
General Service	410	45	T	469–696	385	Low
Gunshots	9	-1	C	4–16	7	Expected
Liquor	170	-31	T	49–106	26	Low
Lost Property	9	0	C	4–14	5	Expected
Medical	4284	564	T	4265–6614	5510	Expected
Psychological	62	0	C	46–78	58	Expected
Suspicious Activity	324	-5	C	261–387	253	Low
Traffic Collision	1009	50	T	1044–1377	1169	Expected
Traffic Complaint	266	10	C	167–365	224	Expected
Vagrancy	6	-1	C	1–12	9	Expected

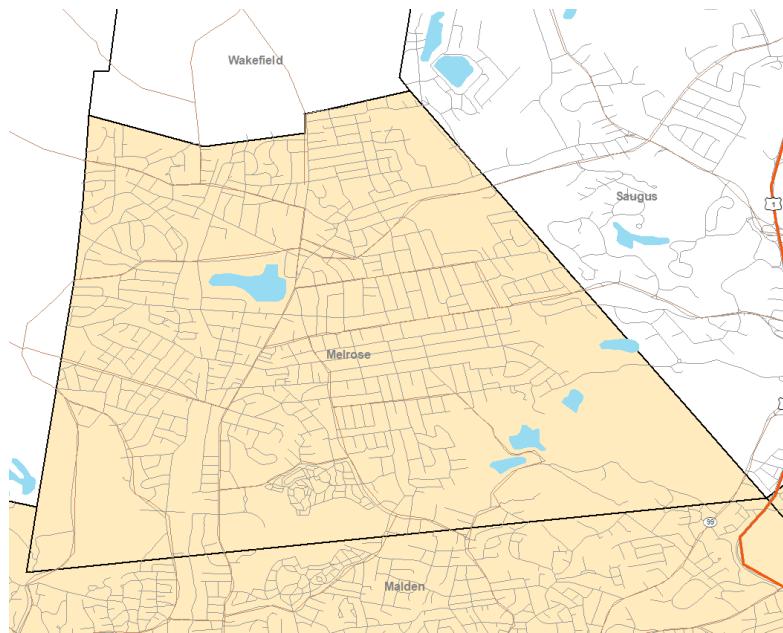
All selected call-for-service categories were within expected ranges in the latter half of 2019.

Collisions in Malden

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Vehicle in Traffic	329	16	T	343–445	388	Expected
Parked Vehicle	2	0	C	0–4	2	Expected
Pedestrian	28	2	T	26–48	30	Expected
Bicyclist	3	0	C	1–5	0	Low
Animal	0	0	o	0–0	0	Expected
Fixed Object	0	0	C	0–0	0	Expected
Curb/Barrier/Embankment	0	0	C	0–0	0	Expected
Rollover/Jackknife	0	0	C	0–0	0	Expected
Other/Unknown	38	2	C	22–54	57	High
Total	400	20	T	406–555	477	Expected

Like most of the communities, Malden showed no significant increase in traffic collisions in the second half of 2019.

6-month analysis: Melrose



Population (est. 2018): 28,552

Area: 4.8 square miles

Police officers: 47

City center distance to Encore:
4.16 miles

On the outskirts of our study, Melrose is smaller and more suburban than most of the other communities analyzed here. It is avoided by highways and other major travel routes to Encore, it has no hotels, and it lacks most of the other attractions and amenities that a visitor to the area would seek out. Hence, it is unlikely to experience much impact from Encore unless this region experiences the type of wide-ranging crime patterns that have been rare in the other casino communities. We will be monitoring activity in and around Melrose Wakefield Hospital, which serves as one destination for medical events at Encore. For now, almost all the statistics below are normal.

Crimes in Melrose

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Murder	0	0	C	0-0	0	Expected
Sexual Assault	1	0	C	0-2	0	Expected
Kidnapping	1	0	C	0-1	0	Expected
Robbery	2	-1	T	0-3	3	Expected
Aggravated Assault	9	0	C	4-14	11	Expected
Simple Assault	32	-2	C	24-40	37	Expected
Threats	16	-3	T	5-9	7	Expected
Arson	1	0	C	0-3	0	Expected
Burglary	20	-5	T	4-17	15	Expected
Theft from Persons	0	0	C	0-1	1	Expected
Purse-Snatching	1	0	C	0-2	0	Expected
Shoplifting	4	-1	C	2-6	0	Low
Theft from Building	19	-3	T	4-21	8	Expected
Theft from Machine	0	0	C	0-0	0	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Theft from Vehicle	29	-5	C	4–54	24	Expected
Theft of MV Parts	1	0	C	0–2	0	Expected
Other Theft	51	-1	C	44–58	46	Expected
Auto Theft	10	0	C	5–15	9	Expected
Forgery	2	0	C	0–4	3	Expected
Fraud	13	0	C	6–20	14	Expected
Credit Card Fraud	1	0	C	0–2	2	Expected
Identity Theft	3	0	C	2–4	4	Expected
Employee Theft	1	0	T	0–1	0	Expected
Stolen Property	2	0	C	0–4	1	Expected
Vandalism	59	-4	T	38–54	41	Expected
Drugs	4	-1	C	1–8	7	Expected
Drug Equipment	0	0	C	0–1	1	Expected
Statutory Rape	0	0	C	0–1	0	Expected
Gambling	0	0	C	0–1	1	Expected
Pornography	0	0	C	0–1	0	Expected
Prostitution	0	0	C	0–0	0	Expected
Weapons	1	0	C	0–3	3	Expected
Bad Checks	1	0	C	0–3	1	Expected
Disorderly	5	-1	T	2–7	6	Expected
Drunk Driving	4	0	C	1–7	3	Expected
Drunkenness	6	-1	T	1–9	5	Expected
Family Offenses	0	0	C	0–0	0	Expected
Liquor Laws	2	-1	T	0–4	1	Expected
Runaway	0	0	C	0–0	0	Expected
Trespassing	3	-1	T	0–3	1	Expected
Violent Total	61	-5	T	33–69	58	Expected
Property Total	217	-19	T	118–220	168	Expected
Total Crimes	304	-29	T	147–382	256	Expected

Melrose's crimes were all within expected ranges for the last six months of 2019. Totals followed trends and came in slightly lower than the eight-year average.

Selected calls for service in Melrose

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Abandoned Vehicle	3	0	C	1–5	1	Expected
Disabled Vehicle	24	1	C	15–33	29	Expected
Domestic Dispute	43	-3	T	23–47	26	Expected
General Service	529	21	T	536–692	569	Expected
Gunshots	0	0	C	0–1	0	Expected
Liquor	0	0	C	0–1	0	Expected
Lost Property	46	8	T	51–90	73	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Medical	739	35	T	740–1019	938	Expected
Overdose	10	0	C	4–17	5	Expected
Suspicious Activity	260	5	C	222–298	308	High
Traffic Collision	293	-4	T	252–303	286	Expected
Traffic Complaint	333	74	T	423–778	649	Expected

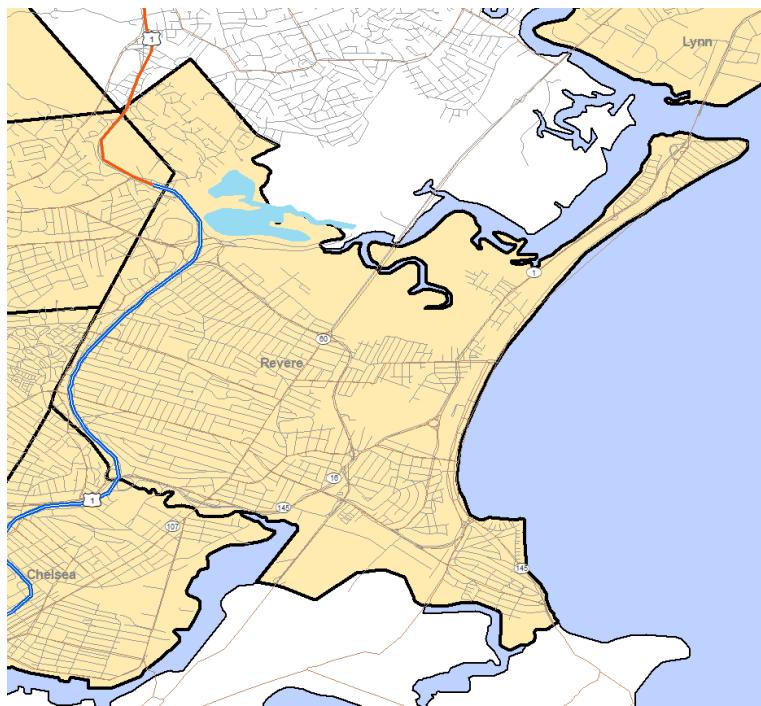
Melrose's calls for service were also low for the period, with the exception of suspicious activity calls. The increase is primarily in November, but with no geographic concentration.

Collisions in Melrose

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Vehicle in Traffic	92	3	T	83–129	95	Expected
Parked Vehicle	39	-1	C	33–45	39	Expected
Pedestrian	6	0	C	3–9	2	Low
Bicyclist	2	0	C	1–3	1	Expected
Animal	0	0	C	0–0	0	Expected
Fixed Object	11	1	C	6–16	18	High
Curb/Barrier/Embankment	4	0	C	2–6	2	Expected
Rollover/Jackknife	1	0	C	0–2	0	Expected
Other/Unknown	5	-1	T	2–3	3	Expected
Total	160	2	C	145–175	160	Expected

Total crashes were exactly average in Melrose, low in the pedestrian category and high in the "fixed object" category. Overall, nothing significant seems to have changed.

6-month analysis: Revere



Population (est. 2018): 54,296

Area: 10.0 square miles

Police officers: 103

City center distance to Encore:
3.52 miles

A reasonably busy north shore community, Revere shares a small part of its western border with Everett. It is far enough from Encore not to be in the facility's immediate area of influence, and so far I don't see any changes attributable to Encore. We will continue to monitor travel routes, hotels, restaurants, and shopping centers. The agency employs a full-time crime analyst, which always makes this process easier.

Crimes in Revere

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Murder	1	0	C	0-2	3	High
Sexual Assault	22	0	C	15-29	9	Low
Kidnapping	3	0	C	0-6	1	Expected
Robbery	31	-4	T	15-28	20	Expected
Aggravated Assault	101	-2	C	91-111	56	Low
Simple Assault	221	-5	C	184-258	137	Low
Threats	119	-6	C	90-148	98	Expected
Arson	2	-1	C	0-5	0	Expected
Burglary	81	-9	T	38-80	37	Low
Theft from Persons	6	0	C	4-8	7	Expected
Purse-Snatching	6	-1	C	3-9	3	Expected
Shoplifting	106	11	T	80-198	81	Expected
Theft from Building	53	-3	C	38-68	49	Expected
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	44	2	C	25-63	47	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Theft of MV Parts	2	1	T	1-6	2	Expected
Other Theft	213	-14	T	113-225	87	Low
Auto Theft	79	-9	T	41-61	33	Low
Forgery	13	0	C	6-20	11	Expected
Fraud	49	-1	C	38-60	66	High
Credit Card Fraud	16	-3	T	2-15	5	Expected
Identity Theft	21	-1	T	14-21	16	Expected
Employee Theft	4	-1	T	1-4	2	Expected
Stolen Property	17	0	C	11-23	13	Expected
Vandalism	212	-16	T	108-210	131	Expected
Drugs	47	-4	T	26-49	29	Expected
Drug Equipment	0	0	T	0-1	0	Expected
Statutory Rape	4	0	C	1-7	7	Expected
Gambling	0	0	C	0-1	1	Expected
Pornography	1	0	C	0-3	3	Expected
Prostitution	2	0	C	0-4	2	Expected
Weapons	14	-1	C	7-21	11	Expected
Bad Checks	10	-1	C	4-16	3	Low
Disorderly	45	-2	C	32-58	31	Low
Drunk Driving	34	4	T	23-74	24	Expected
Drunkenness	36	-6	T	6-41	15	Expected
Family Offenses	1	0	C	0-2	1	Expected
Liquor Laws	10	1	C	4-16	14	Expected
Runaway	0	0	C	0-0	0	Expected
Trespassing	18	0	C	11-25	10	Low
Violent Total	498	-17	T	395-582	324	Low
Property Total	921	-45	T	572-921	590	Expected
Total Crimes	1644	-72	T	1032-1976	1065	Expected

Revere is one of two cities to see an unusually high **murder** total, involving local residents with non-casino causes. **Fraud** also increased, with Target reporting numerous incidents of price tampering and various con games reported at area residences, suggesting telephone or online fraud.

Selected calls for service in Revere

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Abandoned Vehicle	68	7	T	64-125	58	Low
Disabled Vehicle	163	11	T	146-269	196	Expected
Domestic Dispute	309	36	T	340-569	413	Expected
General Service	668	14	C	521-815	502	Low
Gunshots	16	5	T	11-55	38	Expected
Liquor	8	-1	C	0-16	1	Expected
Lost Property	60	6	T	72-96	82	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Medical	308	107	T	465–899	587	Expected
Psychological	5	0	C	3–7	1	Low
Suspicious Activity	661	47	T	640–1056	612	Low
Traffic Collision	867	82	T	1089–1297	1110	Expected
Traffic Complaint	491	79	T	615–966	672	Expected

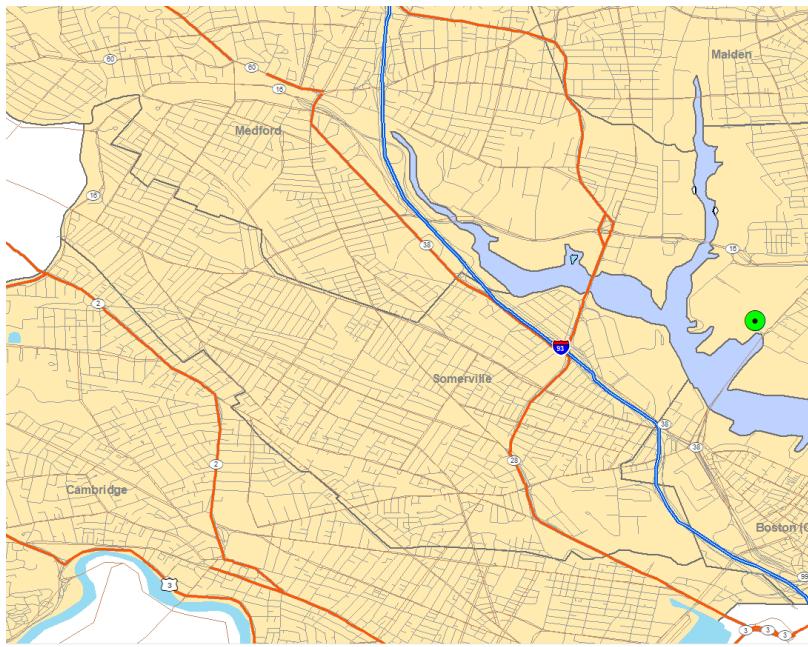
None of Revere's calls for service showed a significant increase in the last six months of 2019.

Collisions in Revere

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Vehicle in Traffic	206	10	T	179–301	187	Expected
Parked Vehicle	42	5	T	56–67	56	Expected
Pedestrian	17	0	C	14–20	11	Low
Bicyclist	5	0	C	2–8	3	Expected
Animal	0	0	C	0–0	0	Expected
Fixed Object	26	1	C	16–36	30	Expected
Curb/Barrier/Embankment	19	2	T	17–34	12	Low
Rollover/Jackknife	1	0	C	0–3	4	High
Other/Unknown	11	-1	T	7–13	6	Low
Total	329	17	T	326–463	309	Low

Collisions in Revere had increased steadily since 2015 but they reversed course in 2019, ending not only below the trendline for the period but also below the 6-month average. If Encore Boston Harbor occasioned an increase in traffic in the region, it is not being reflected in collisions on Revere roads.

6-month analysis: Somerville



Population (est. 2018): 82,161

Area: 4.2 square miles

Police officers: 124

City center distance to Encore:
1.45 miles

The most densely populated city in New England, Somerville sits across the Mystic River from Everett. Once known as Cambridge's working-class sibling, Somerville has experienced significant growth and revitalization in the 21st century, greatly reducing its historic crime rate. A full-time crime analyst is contributing her expertise to this project.

Assembly Square has not yet been connected to Encore by a footbridge, so we saw no increase in that area. The rest of the city had some categorical changes, but none in a way clearly linked to Encore.

Crimes in Somerville

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Murder	0	0	C	0–1	0	Expected
Sexual Assault	24	0	C	18–30	26	Expected
Kidnapping	2	-1	T	0–3	4	High
Robbery	26	-3	T	11–32	20	Expected
Aggravated Assault	65	0	C	52–78	73	Expected
Simple Assault	111	1	C	87–135	122	Expected
Threats	17	-1	C	6–28	15	Expected
Arson	5	-1	C	0–13	1	Expected
Burglary	137	-20	T	66–126	62	Low
Theft from Persons	0	0	C	0–0	0	Expected
Purse-Snatching	0	0	C	0–0	0	Expected
Shoplifting	0	0	C	0–0	0	Expected
Theft from Building	35	2	C	24–46	39	Expected
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	155	-29	T	62–120	99	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Theft of MV Parts	1	0	C	0–1	0	Expected
Other Theft	293	-22	T	173–312	255	Expected
Auto Theft	63	0	C	53–73	44	Low
Forgery	16	1	C	7–25	20	Expected
Fraud	63	2	C	48–78	74	Expected
Credit Card Fraud	20	3	C	7–33	25	Expected
Identity Theft	52	7	C	18–86	47	Expected
Employee Theft	0	0	C	0–1	0	Expected
Stolen Property	0	0	C	0–0	0	Expected
Vandalism	155	-13	T	86–142	123	Expected
Drugs	37	-1	C	26–48	27	Expected
Drug Equipment	0	0	C	0–0	0	Expected
Statutory Rape	2	0	C	0–4	4	Expected
Gambling	0	0	C	0–0	0	Expected
Pornography	2	0	C	1–3	6	High
Prostitution	2	0	C	0–4	0	Expected
Weapons	20	1	C	15–25	28	High
Bad Checks	0	0	C	0–0	0	Expected
Disorderly	42	-3	T	26–38	24	Low
Drunk Driving	20	0	C	13–27	13	Expected
Drunkenness	0	0	C	0–0	0	Expected
Family Offenses	24	-4	T	13–20	19	Expected
Liquor Laws	10	-1	C	6–14	6	Expected
Runaway	0	0	C	0–0	0	Expected
Trespassing	11	1	T	10–20	9	Low
Violent Total	245	-4	C	174–307	260	Expected
Property Total	995	-70	T	623–931	789	Expected
Total Crimes	1410	-81	T	828–1566	1185	Expected

Somerville's overall crime totals were within predicted ranges. Its property and total crime figures continued the expected downward trend. Only a few odd crimes were above normal.

Kidnapping

Somerville's 4 kidnappings during this period exceeded its normal range by only one. Victims were two adult females from Somerville, one adult female from Boston, and one child from Somerville; suspects were all adult males from Boston and Chelsea. Evidence suggests the incidents are unrelated, probably domestic or custodial, with no association with Encore.

Pornography

Half a dozen incidents of "obscene material" were recorded at residences in Somerville in the latter half of 2019, but none of the suspects are listed as coming from Somerville. I provided a list of cases to the SPD for further investigation but had not received any additional information by the deadline for this report.

Weapons Offenses

There were an increased number of charges for possession of knives and firearms, mostly in July, mostly on the street. Geographically, incidents are clustered in the eastern part of the city, centered on Route 28, particularly in East Somerville and Assembly Square.

Selected calls for service in Somerville

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Abandoned Vehicle	11	0	C	6–16	17	High
Disabled Vehicle	101	7	T	109–147	124	Expected
Domestic Dispute	301	-17	T	186–290	251	Expected
General Service	1037	4	C	858–1216	984	Expected
Gunshots	24	0	C	15–33	31	Expected
Liquor	205	-25	T	77–213	185	Expected
Lost Property	168	-10	T	92–180	130	Expected
Overdose	56	-4	C	36–76	43	Expected
Psychological	172	17	T	204–275	209	Expected
Suspicious Activity	509	-14	C	391–627	417	Expected
Traffic Collision	1353	-49	C	1048–1658	1159	Expected
Traffic Complaint	831	157	T	708–1890	1347	Expected

Somerville's call-for-service types almost all fell within expected ranges during the latter half of 2019, with one exception. The wide range in the **traffic complaint** category is due to significantly increased usage of the "TRESPROW" code starting in 2016. If that code is removed, complaints drop to an average of 125, an expected range of 117–194, and a 2019 value of 161.

Abandoned Vehicles

No patterns in this one. Incidents are spread throughout the period and throughout the city. There are pairs on Summit Avenue in July and Lowell Street in November but otherwise no hot spots and no commonalities.

Collisions in Somerville

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Total	298	24	T	280–337	284	Expected

Somerville did not implement electronic crash reporting using the agency's records management system until 2018. Data provided for the period prior to 2018 lacks the "category" field. Total collisions, however, were average to low for the city in the six months post-Encore.

State police data

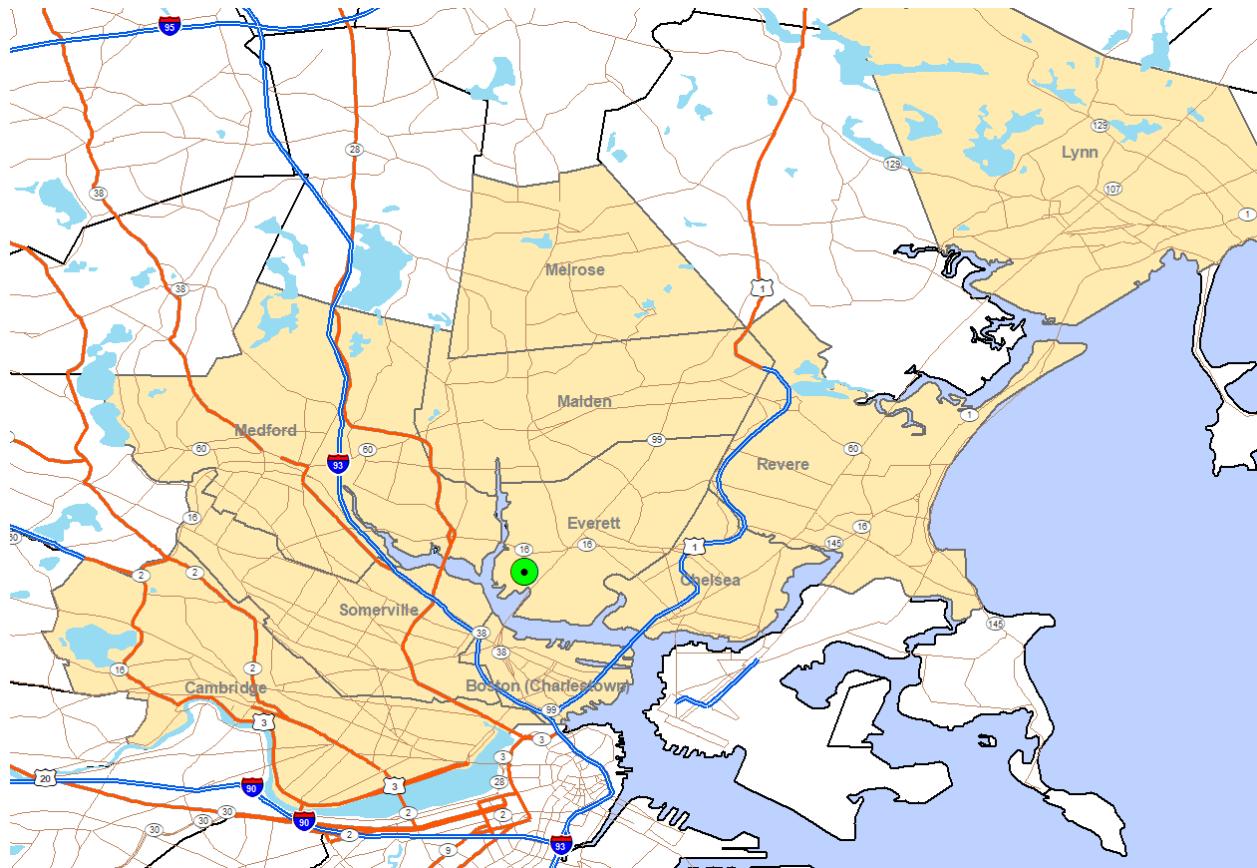


Figure 7: A network of State Police-patrolled highways and routes feeds the Encore Boston Harbor area.

State Police patrol state highways (principally I-90, I-93, and U.S. Route 1) in the Boston area, plus state properties and parks. They assist local police in response to some crime issues, and the State Police Gaming Enforcement Unit has taken over primary enforcement responsibilities at Encore Boston Harbor.

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.

Naturally, the State Police are poised to see an increase in traffic on state roads that feed Encore Boston Harbor as well as at the casino itself. This will primarily be reflected in traffic-related calls for service and crimes, including collisions, drug possession, and drunk driving. The statistics below show several increases in crashes and other activity, although six months is too soon to reach any significant conclusions.

The data below comes from a combination of multiple State Police stations, including A-5 (Revere), A-4 (Medford), H-5 (Brighton), H-4 (downtown Boston), A-6 (Danvers), a section of Troop E eliminated and re-allocated in 2018, and various mobile statewide units such as headquarters units, canine units, and investigators.

Selected activity

Activity	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
911 Hangup or Error	2	0	C	0-4	15	High
Abandoned Vehicle	7	0	C	4-10	22	High
Abduction	1	0	C	0-3	0	Expected
Administrative	1496	520	T	1316-5134	4107	Expected
Alarm	7	0	C	3-11	8	Expected
All Other	217	8	C	129-305	122	Low
Animal Complaint	34	2	C	20-48	53	High
Arson	2	0	C	0-4	0	Expected
Assault	31	0	C	23-39	37	Expected
Assist Other Agency	225	14	T	230-335	268	Expected
Bomb Threat	3	-1	T	0-3	2	Expected
Building Check	3178	-166	C	2115-4241	2060	Low
Burglary	9	-2	T	3-9	8	Expected
Crime Enforcement	26	8	T	19-94	8	Low
Death	130	0	C	113-147	144	Expected
Disabled Vehicle	793	-29	C	656-930	902	Expected
Disorderly	141	-1	C	126-156	138	Expected
Domestic Dispute	10	0	C	6-14	12	Expected
Drugs	17	0	C	10-24	17	Expected
Field Interview	14	2	T	14-33	29	Expected
Fire	57	-3	T	28-66	37	Expected
Found Property	2	0	C	0-4	3	Expected
General Service	93	17	T	74-230	136	Expected
Gunshots	9	1	C	3-15	2	Low
Investigation	108	-5	C	83-133	145	High
Liquor	11	0	C	6-16	6	Expected
Lost Property	19	1	C	14-24	32	High
Medical	175	0	C	150-200	186	Expected
Missing Person	24	1	C	12-36	25	Expected
Municipal or Utility	73	-8	C	36-110	99	Expected
Other Theft	14	-4	T	2-14	12	Expected
Prisoner Transport	124	29	T	121-350	280	Expected
Psychological	10	0	C	4-16	13	Expected
Recovered Vehicle	30	-5	T	14-35	19	Expected
R.O. Violation	2	0	C	0-4	1	Expected
Road Conditions	181	3	C	139-223	238	High
Robbery	9	0	C	5-13	7	Expected
Suspicious Activity	62	0	C	47-77	89	High
Threats/Harassment	7	1	T	6-12	11	Expected
Traffic Collision	1951	55	T	2058-2281	2148	Expected
Traffic Complaint	388	11	C	260-516	517	High

Activity	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Traffic Enforcement	123	-1	C	74–172	144	Expected
Traffic Offenses	30	-2	C	20–40	33	Expected
Trespassing	26	5	T	24–59	31	Expected
Vandalism	14	-2	T	8–14	12	Expected
Vehicle Stop	1460	-223	T	690–907	1065	High
Warrant Service	40	-4	T	17–40	52	High
Weapons	2	-1	C	0–5	2	Expected
Well-Being Check	29	3	T	21–60	63	High
Youth Disorder	1	0	C	0–2	2	Expected

The State Police had more increases in activity in the area than any local agency. Some brief notes:

- Of the **911 hangups**, more than half were in Cambridge, primarily involving Memorial Drive businesses.
- Medford dominated the increase in **abandoned vehicles**, particularly on Route 93.
- The **lost property** complaints are almost all at State Police facilities in Medford and Revere.

Crashes on state roadways

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Route 16	414	14	T	415–524	419	Expected
I-93	223	6	C	195–251	222	Expected
Route 28	228	3	C	209–247	213	Expected
Route 1	179	5	C	152–206	171	Expected
Memorial Drive	91	-2	C	78–104	115	High
Route 1A	61	1	C	49–73	81	High
Lynnway	31	5	T	37–54	43	Expected
Mystic Avenue	29	1	C	21–37	43	High
Route 38	31	3	T	33–56	42	Expected
Alewife Brook Pkwy	48	1	C	38–58	39	Expected
Revere Beach Pkwy	21	3	T	17–48	38	Expected
Mystic Valley Pkwy	11	2	T	11–28	36	High
Revere Beach Blvd	30	1	T	27–38	35	Expected
McGrath Hwy	14	1	C	5–23	34	High
Route 145	20	1	C	13–27	33	High
Fresh Pond Pkwy	49	-1	C	39–59	32	Low
Msgr. O'Brien Hwy	28	0	C	23–33	25	Expected
Fellsway East	15	1	C	7–23	22	Expected
Ocean Avenue	19	1	C	11–27	22	Expected
Route 2	33	-2	C	16–50	21	Expected
Lynn Fells Pkwy	19	2	T	17–36	21	Expected
Roosevelt Circle	10	-2	T	4–12	15	High

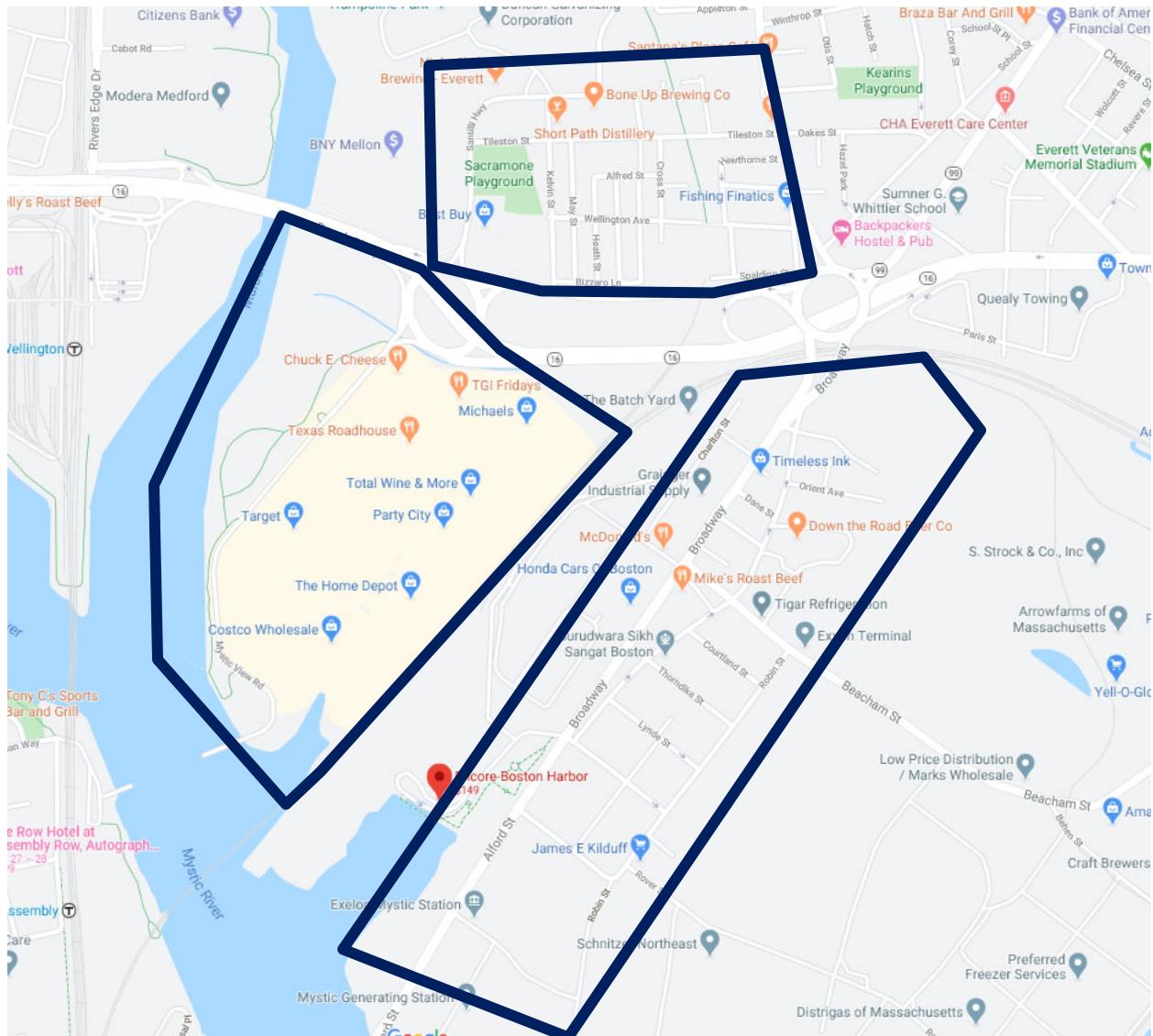
Unlike the local communities, State Police saw several increases in collisions along patrolled roadways, although not with any particular consistency in terms of proximity to the casino.

Spatial analysis

With only 6 months' worth of data, and data missing from some key agencies, I'm going to confine the spatial analysis for the purposes of this report to the immediate area around Encore Boston Harbor. With a year's worth of data, I will be able to conduct more thorough spatial analyses, to include travel routes to and from the casino and key service locations along the way.

The areas immediately adjacent to Encore Boston Harbor include:

1. To the **west**, the Gateway Center Shopping Plaza. This is the closest set of retail stores and non-casino restaurants. Although it is immediately adjacent to Encore, there is no "official" way to walk from one to the other. People are crafty, however, and even if they don't find a way to walk, it is only a short drive back up to 16.



2. To the **east**, Broadway and a small mixed residential/commercial area extending one block to the east. There's a Dunkin' Donuts, a Mike's Roast Beef, a McDonald's, and some vehicle-related service businesses in the area. People driving to the casino pass through this area, and it certainly must have seen more traffic over the last six months.

3. To the **north**, a residential neighborhood extending from Route 16 with a couple of schools, a charge, a playground, and some local businesses. There's a Best Buy in the southwest corner of the area.

Activity in the west polygon (Gateway Shopping Plaza)

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Thefts from Vehicles	1	0	C	0-3	1	Expected
Shoplifting	25	0	C	15-35	25	Expected
Vandalism	2	0	C	0-4	3	Expected
Drug/Liquor Crimes	1	0	C	0-2	0	Expected
Violent Crime	2	0	C	0-4	4	Expected
Property Crime	39	1	C	27-51	38	Expected
Total Crime	43	1	C	32-54	46	Expected
Traffic Complaints	1	0	C	0-6	3	Expected
Total Calls for Service	211	-12	T	129-213	212	Expected
Traffic Collisions	2	0	C	0-5	4	Expected

Activity in the east polygon (Broadway)

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Thefts from Vehicles	2	0	C	0-5	3	Expected
Shoplifting	0	0	C	0-1	0	Expected
Vandalism	6	0	C	3-9	3	Expected
Drug/Liquor Crimes	3	1	C	1-7	9	High
Violent Crime	6	0	C	3-9	8	Expected
Property Crime	25	-1	C	15-35	17	Expected
Total Crime	40	0	C	29-51	35	Expected
Traffic Complaints	27	3	C	13-41	45	High
Total Calls for Service	365	-4	C	339-391	304	Low
Traffic Collisions	16	1	C	8-24	12	Expected

Activity in the north polygon (neighborhood)

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Thefts from Vehicles	3	0	C	1-6	2	Expected
Shoplifting	4	0	C	1-9	7	Expected
Vandalism	6	-1	T	2-8	3	Expected
Drug/Liquor Crimes	3	1	C	0-6	0	Expected
Violent Crime	5	0	C	2-8	6	Expected
Property Crime	26	-2	T	12-28	28	Expected
Total Crime	40	-1	C	33-47	43	Expected
Traffic Complaints	14	0	C	7-21	23	High
All Calls (reactive)	241	-16	T	146-236	232	Expected
Traffic Collisions	3	1	T	4-6	9	High

Activity in the all polygons

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul-Dec 2019	Result
Thefts from Vehicles	7	0	C	2–12	6	Expected
Shoplifting	29	0	C	19–39	32	Expected
Vandalism	14	-1	T	7–16	9	Expected
Drug/Liquor Crimes	5	1	T	3–15	9	Expected
Violent Crime	13	0	C	8–18	18	Expected
Property Crime	91	-1	C	78–104	83	Expected
Total Crime	118	0	C	104–132	116	Expected
Traffic Complaints	44	2	C	32–56	71	High
Total Calls for Service	817	-32	T	579–797	748	Expected
Traffic Collisions	21	2	C	11–32	25	Expected

Overall, we see very few increases in the three areas despite the extra traffic. The increase in liquor related crimes in the Broadway area is composed mostly of **drunk driving** incidents between 22:00 and 03:00 and seems likely related to the casino's presence, although we would ask the Everett Police Department to check for "last drink" statements on the related incidents (784639, 782314, 778695, 776562, 775005, 774917, and 774313).

The eastern area also saw an increase in **parking complaints**, predominantly on Bow Street. Whether it's casino-related depends on whether it makes any sense for people to park on nearby streets instead of the casino garage. There are also parking complaints in the northern neighborhood, scattered throughout the area. **Traffic collisions** were also high in the neighborhood, but the numbers are very small. Many of these are hit and runs to parked cars.

Overall, the even those incident types that increased increased so mildly that the change would be unnoticeable on a day-to-day basis.

Future analytical plans

This report being an initial six-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 Encore Boston Harbor 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 mid-2020.
- A comparative analysis of traffic collisions in the Everett area versus control areas. This probably will not be possible until a public statewide crash dataset is available, likely in 2021.
- Comparison of Encore Boston Harbor 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.
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.
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Crime definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Pornography: Possession, sale, or manufacturing of illegal pornography. 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: Nonforcible sexual activity with an individual who is unable to give legal consent because of age.

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

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

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

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

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

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

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

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

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

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

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

Call for service definitions

Calls for service include both criminal and noncriminal police incidents and activities. In the case of criminal activities, such incidents receive a longer, more detailed report in the police records management system, and it 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