

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

Covering the first eight months of operations, three months of closure for COVID-19, and three months of restricted reopening, July 2019–October 2020

Christopher W. Bruce

Crime Analysis Consultant to the Massachusetts Gaming Commission

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Executive summary

Summary

Encore Boston Harbor opened on 23 June 2019, drawing more than 3.5 million visitors during the first eight 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. COVID closures caused crime and crashes to plummet, and future analyses of the casino's impact will be difficult given how much COVID has influenced society and economics.

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.
- The period covered by this report runs from July 2019 to December 2020. During these 18 months, Encore Boston Harbor enjoyed 8 months of normal operation, was closed for over 4 months because of the onset of COVID, and opened for a little over 5 months with restricted operating parameters. This report analyzes all three time periods but for reasons given later focuses primarily on the first 8 months.
- Data was collected from the records management systems of the Everett, Boston, Chelsea, Lynn, Melrose, Revere, Saugus, and Somerville Police Departments and the Massachusetts State Police. Malden is participating in this analysis series but could not provide data for this report (they did previously participate in a 6-month analysis). Cambridge and Medford were invited to participate but declined.
- 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.

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

- 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 thefts from vehicles, statutory rape, prostitution, and liquor law violations, but none of these could be traced in any firm way to Encore. Most of the increases occurred primarily in single cities, showing no consistency throughout the region.
- 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 a small number of incidents that did not occur at the casino itself. Everett saw higher-than expected totals for murder, sexual assault, aggravated assault, thefts from buildings, thefts from vehicles, fraud, bad checks, disorderly conduct, and drunk driving. Some of these may have a circumstantial relationship to Encore.
- A full analysis of drunk driving evidence suggests that Encore may be responsible for a small number of drunk drivers on the roads.

- There is no evidence of an Encore-related increase in crashes on local roads.
- During the COVID closures, crime and crashes plummeted in all area communities.
- During the re-opening period, some crimes rebounded but most remained low.
- 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. Travel routes to and from the facility showed only minimal increases.
- Melrose-Wakefield Hospital in Melrose has seen increases in crimes, but so far there is no definitive evidence of an Encore connection.

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 national and international studies have 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, and still a third in 2019, in anticipation of the opening of Encore Boston Harbor. This is the third report on Encore.

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
September 2019	Eight-month analysis of MGM Springfield	Showed increases in traffic collisions and complaints but few crime increases.
September 2019	Baseline analysis of Encore Boston Harbor area	First report on this casino

October 2019	Four-year analysis of Plainridge Park	Final Plainridge Park reports shows few public safety issues attributable to the casino.
February 2020	One-year analysis of MGM Springfield	MGM is shown to be potentially related to some traffic issues and small patterns in specific communities.
March 2020	Six-month analysis of Encore Boston Harbor	Like MGM, Encore itself is busy, but has few detectable influences on surrounding area.
February 2021	18-month analysis of MGM Springfield	First report to cover COVID-era closings.
February 2021	1-year analysis of Encore Boston Harbor	This report.
April–June 2021	Special reports on drunk driving, casino-based crime, and the MGM 2-year report	

Methodology

The data used in this report was collected from the contributing agencies. For Chelsea, Lynn, Malden, Melrose, Revere, Saugus, and Somerville, I established an Open Database Connectivity (ODBC) connection to each of these agencies' records management (RMS) and computer-aided dispatch (CAD) 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	dtreported	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.

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.

Particular threats caused by COVID-related restrictions and shutdowns are covered in that section.

Interpreting the statistics in this report

This report compares 8 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 29 February in their respective years.

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:

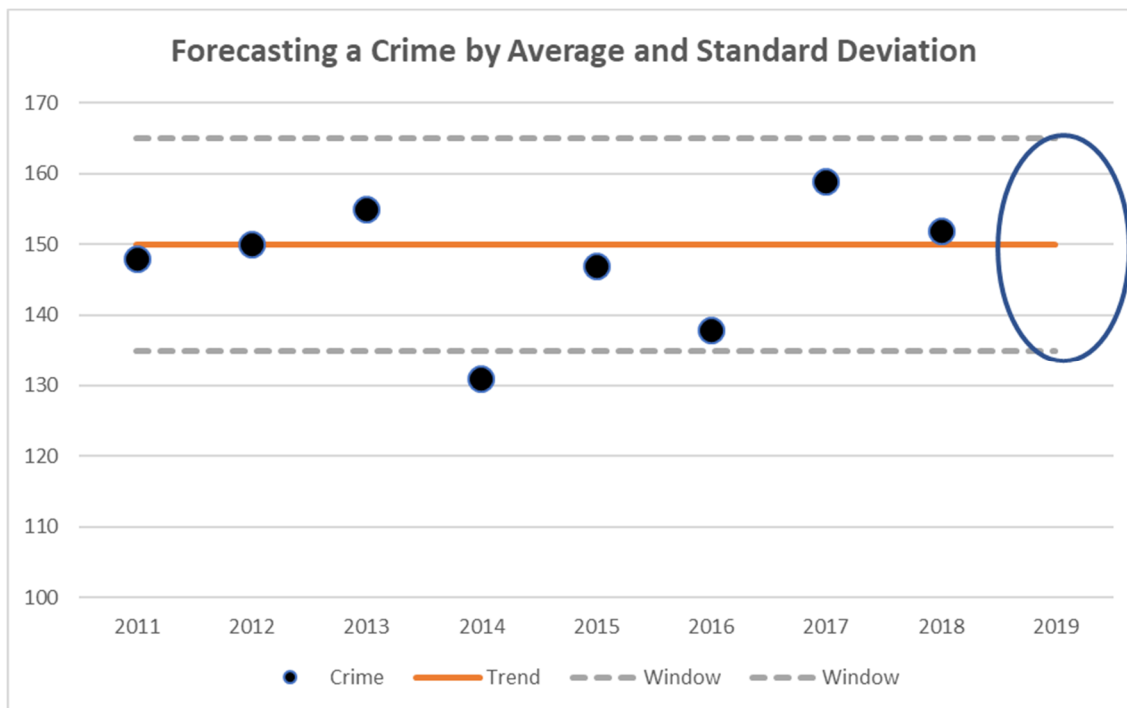


Figure 2: If a crime shows no trend over time, expected values are predicted using its average and standard deviation from the average.

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.

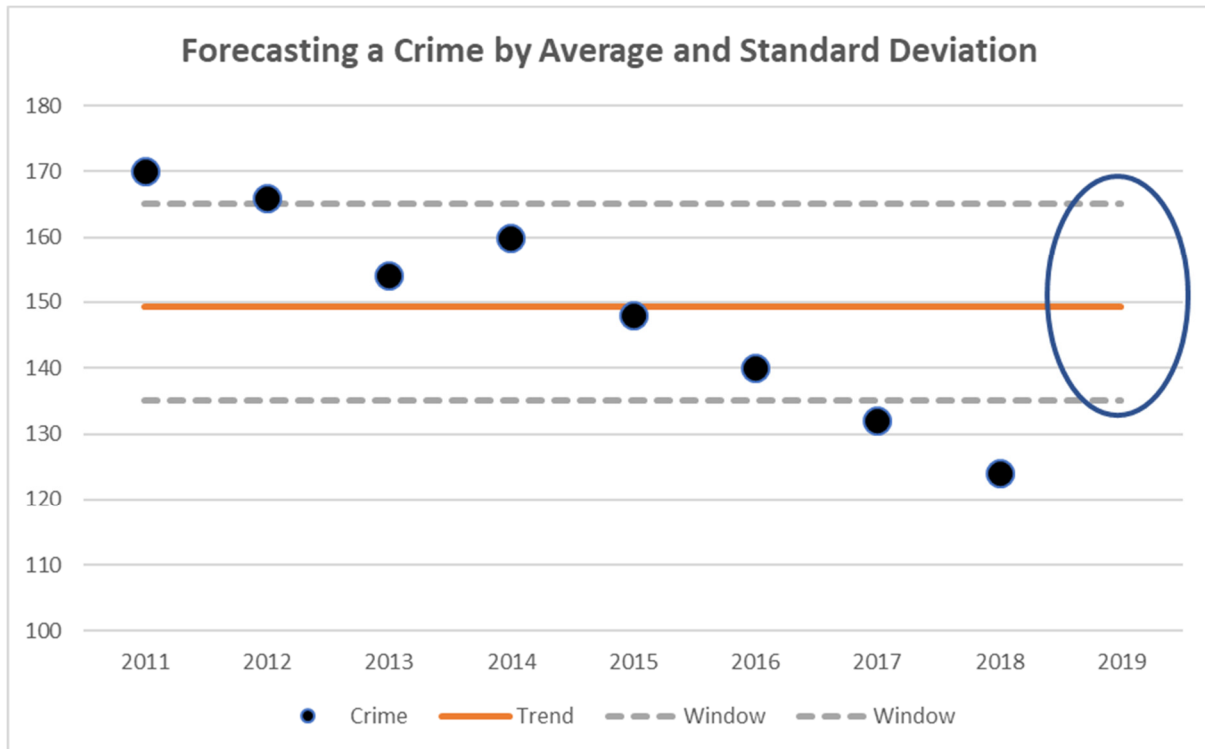


Figure 3: This method works poorly when the crime shows an increasing or decreasing trend over the period.

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.

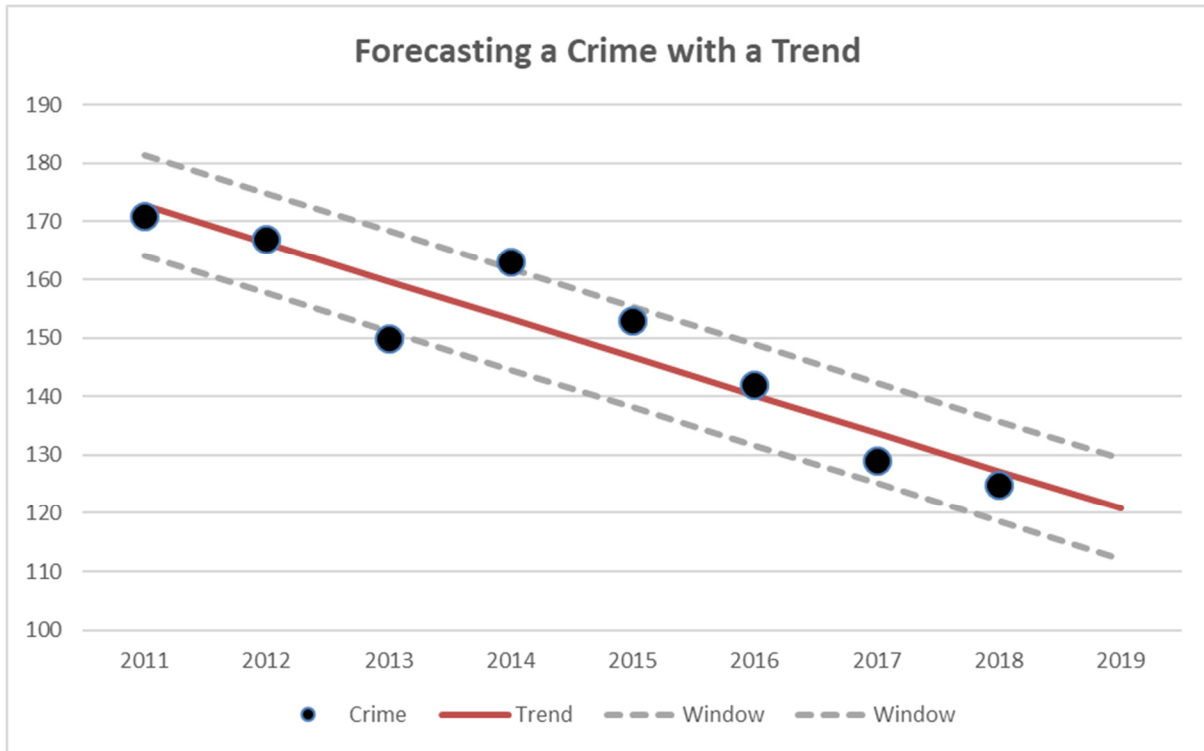


Figure 4: Trends require an alternate method of prediction that take into consideration the trendline and the normal variance around the trendline.

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 2020 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 the bulk of this report covers only an eight-month period, 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–29 February

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	2020	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 29 February.
- **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 2020 figure to fall, with roughly 85% confidence. The more erratic and unpredictable the past data, the wider this window will be.
- **2020.** The actual number of that crime observed between 1 July 2019 and 29 February 2020.
- **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 2020 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.

categories shows several that ended the year higher than what the trend would have suggested. We take a detailed look at each of those categories below.

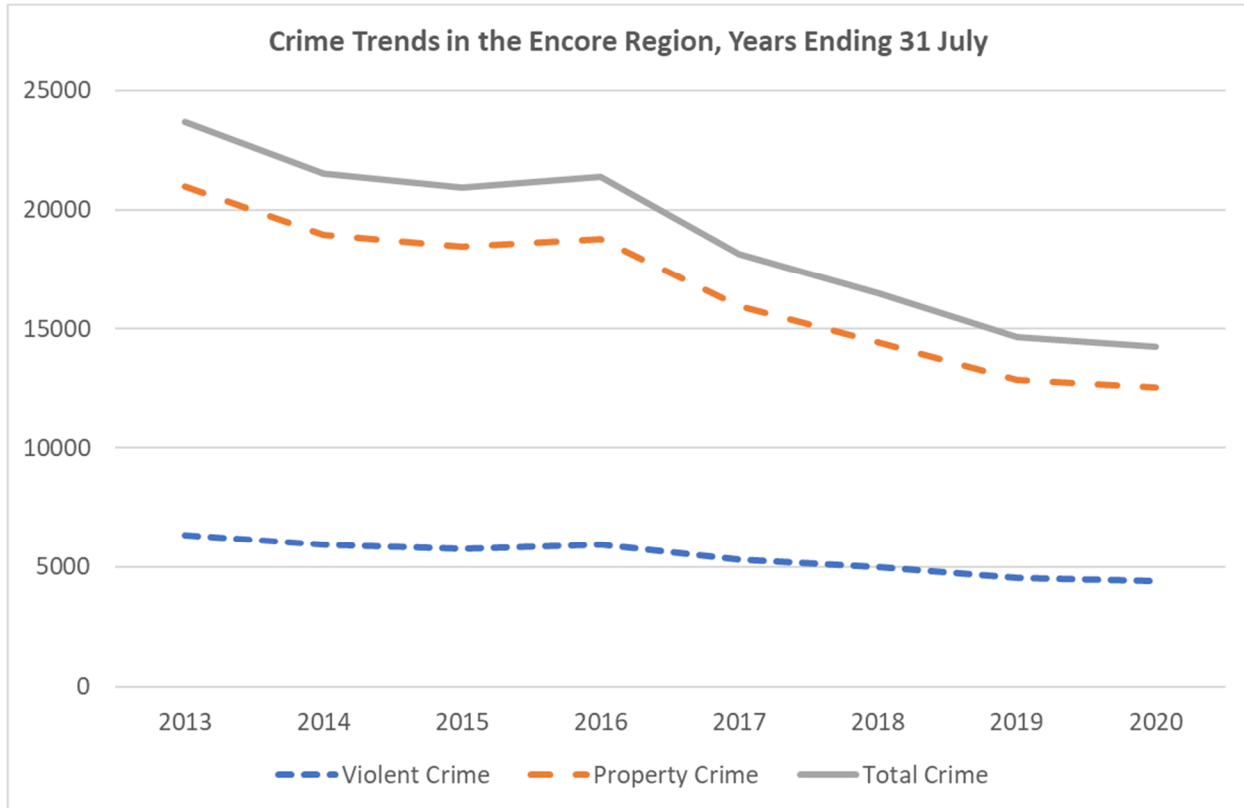


Figure 6: Crime in this region saw steep decreases in the decade before Encore.

Incidents reported to region, 1 July–29 February

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Murder	8	0	C	4–12	12	Expected
Sexual Assault	181	0	C	153–209	158	Expected
Kidnapping	29	-1	C	21–37	27	Expected
Robbery	354	-35	T	181–251	204	Expected
Aggravated Assault	798	-26	T	606–779	687	Expected
Simple Assault	1704	-74	T	1172–1648	1483	Expected
Threats	590	-37	T	382–566	501	Expected
Arson	17	-3	T	4–20	6	Expected
Burglary	868	-124	T	419–551	452	Expected
Theft from Persons	59	-2	T	38–64	50	Expected
Purse-Snatching	21	-2	C	10–32	15	Expected
Shoplifting	523	-15	C	412–634	366	Low
Theft from Building	359	-18	T	242–354	309	Expected
Theft from Machine	1	0	C	0–2	0	Expected
Theft from Vehicle	848	-104	T	442–554	674	High

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Theft of MV Parts	62	-1	C	45-79	23	Low
Other Theft	1769	-158	T	935-1527	1276	Expected
Auto Theft	549	-38	T	353-536	359	Expected
Forgery	125	-10	T	95-130	122	Expected
Fraud	400	-10	C	342-458	443	Expected
Credit Card Fraud	184	5	C	145-223	169	Expected
Identity Theft	225	3	C	174-276	174	Expected
Employee Theft	13	-2	T	6-13	6	Expected
Stolen Property	69	-7	T	32-67	58	Expected
Vandalism	1894	-170	T	1038-1476	1222	Expected
Drugs	448	-33	T	252-440	356	Expected
Drug Equipment	15	1	C	10-20	20	Expected
Statutory Rape	20	1	C	14-26	50	High
Gambling	3	0	C	0-6	6	Expected
Pornography	16	2	C	8-24	22	Expected
Prostitution	41	-12	T	9-10	14	High
Weapons	176	-1	C	150-202	160	Expected
Bad Checks	38	-2	C	21-55	24	Expected
Disorderly	319	-27	T	175-271	254	Expected
Drunk Driving	216	8	C	179-253	248	Expected
Drunkenness	230	-18	T	126-212	154	Expected
Family Offenses	245	4	C	208-282	240	Expected
Liquor Laws	88	2	T	86-104	106	High
Runaway	7	-1	C	2-12	0	Low
Trespassing	187	-3	C	148-226	132	Low
Violent Total	3664	-174	T	2519-3502	3073	Expected
Property Total	7985	-656	T	4560-6411	5724	Expected
Total	13696	-910	T	8405-11708	10583	Expected

The region saw expected volumes of overall crime totals, but some individual categories of property crime were unexpectedly high. Most of these can be traced to a single city, however, leaving few corroborative increases across multiple agencies.

Thefts from vehicles

Boston and Everett both reported higher-than-expected theft-from-vehicle totals, but in neither case does the spatial pattern suggest an Encore connection. Also, both cities continued to experience high totals during the period that the casino closed.

Statutory rape

Chelsea accounted for almost all of the increase; see the Chelsea section for further detail.

Prostitution

Although high for the region, this increase comes entirely from Lynn and is discussed in that city's analysis.

Liquor laws

This one is also influenced heavily by Lynn and is discussed in that agency's analysis.

Selected calls for service reported to region, 1 July–29 February¹

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Abandoned Vehicle	461	-14	C	387–535	401	Expected
Disabled Vehicle	1368	-4	C	1097–1639	1166	Expected
Domestic Dispute	1768	-52	T	1377–1739	1631	Expected
Drugs	422	-13	C	304–540	324	Expected
General Service	4442	-98	T	3352–4744	3762	Expected
Gunshots	212	19	T	238–323	296	Expected
Liquor	677	-62	T	356–498	513	High
Lost Property	688	13	C	627–749	622	Low
Medical	15039	-797	T	9223–16912	12363	Expected
Overdose	421	87	T	511–803	444	Low
Psychological	842	59	T	973–1183	885	Low
Recovered Vehicle	271	-33	T	144–221	166	Expected
Suspicious Activity	4564	-110	T	3549–4696	3660	Expected
Traffic Collision	7637	114	C	7072–8202	7662	Expected
Traffic Complaint	5709	438	T	5879–8670	6743	Expected
Vagrancy	190	8	C	129–251	168	Expected

Liquor related calls for service were the only aggregate category to outperform the expected window for the region. Everett was the only individual agency to cross the threshold, however, and its liquor-related calls are analyzed in its section. Like the burglary statistic for the region, the predicted window is influenced heavily by a decreasing historic trend; the 2020 total was actually the second-lowest in the eight-year period for the region.

Collisions reported to region, 1 July–29 February²

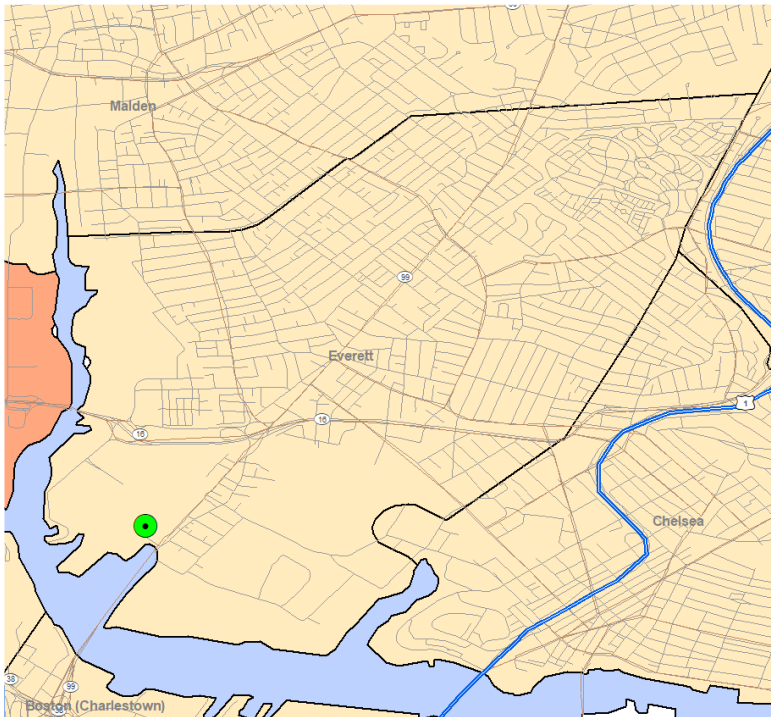
Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Vehicle in Traffic	2980	37	C	2651–3309	2869	Expected
Parked Vehicle	349	-8	C	308–390	344	Expected
Pedestrian	230	8	C	190–270	245	Expected
Bicyclist	28	-1	C	19–37	23	Expected
Animal	4	0	C	1–7	2	Expected
Fixed Object	135	4	C	106–164	150	Expected
Curb/Barrier/Embankment	61	4	T	63–92	39	Low
Rollover/Jackknife	7	0	C	3–11	5	Expected
Other/Unknown	198	-13	T	123–190	132	Expected
Total	4363	25	C	3962–4764	4158	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 This table includes Everett, Chelsea, Somerville, Revere, Saugus, Melrose, and Lynn, but not Malden or Boston.

² Individual categories do not include Somerville, but the total does. Boston and Malden are not included in this table.

8-Month analysis: Everett



Population (est. 2018): 47,195

Area: 3.7 square miles

Police officers: 123

City center distance to Encore:
0.93 miles

Encore Boston Harbor was 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 eight 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 only a few minor changes

Nor has the Everett Police Department collected much *direct* evidence of a casino influence; for instance, an arrested offender who was in town to use the casino. 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, however, that for most crimes, the offender is unknown, so the coding system will not capture all possible Encore-related incidents.) In the eight months post-Encore, the only incidents that the agency recorded not at the casino itself were two simple assaults, a stolen cell phone, a vandalism, a disturbance, a traffic violation, and a warrant arrest. Both of the assaults involved male patrons who had recently left the casino before getting into fights with other men. Assaults 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 Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Murder	1	0	C	1-2	3	High
Sexual Assault	16	0	C	13-19	23	High
Kidnapping	3	0	C	1-5	2	Expected
Robbery	30	-3	T	15-36	14	Low
Aggravated Assault	61	3	T	56-91	82	Expected
Simple Assault	84	-16	T	37-93	87	Expected
Threats	60	-3	C	44-76	63	Expected
Arson	1	0	C	0-2	2	Expected
Burglary	101	-8	C	64-138	67	Expected
Theft from Persons	2	0	C	0-3	3	Expected
Purse-Snatching	3	0	C	2-4	3	Expected
Shoplifting	72	0	C	53-91	70	Expected
Theft from Building	21	-2	T	13-24	31	High
Theft from Machine	0	0	T	0-3	0	Expected
Theft from Vehicle	113	-17	T	47-86	87	High
Theft of MV Parts	6	-1	T	2-5	4	Expected
Other Theft	165	-2	C	149-181	140	Low
Auto Theft	60	-6	T	38-53	48	Expected
Forgery	10	-2	T	5-14	6	Expected
Fraud	18	1	C	9-27	32	High
Credit Card Fraud	42	4	C	20-67	48	Expected
Identity Theft	17	-7	T	2-18	0	Low
Employee Theft	1	0	C	0-2	0	Expected
Stolen Property	9	-1	T	5-9	7	Expected
Vandalism	196	-10	T	131-181	140	Expected
Drugs	34	0	C	26-42	36	Expected
Drug Equipment	14	1	C	8-20	16	Expected
Statutory Rape	1	0	C	0-2	0	Expected
Gambling	0	0	C	0-1	0	Expected
Pornography	1	0	C	0-3	2	Expected
Prostitution	1	0	C	0-3	0	Expected
Weapons	16	4	T	16-38	13	Low
Bad Checks	12	0	C	6-18	19	High
Disorderly	12	2	C	3-22	27	High
Drunk Driving	18	1	C	11-25	43	High
Drunkenness	0	0	C	0-0	0	Expected
Family Offenses	86	15	T	80-146	109	Expected
Liquor Laws	1	0	C	0-3	1	Expected
Runaway	4	0	C	0-8	0	Expected
Trespassing	8	0	C	4-12	11	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Violent Total	255	-18	T	167-322	274	Expected
Property Total	835	-50	T	550-728	688	Expected
Total	1300	-46	T	1001-1231	1239	High

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.

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.

Thefts from Vehicles

The "increase" in 2020 is actually the second-lowest total in 10 years, but it is still higher than the downward trend since 2013 suggested that it would be. Most of the increase is spatially unrelated to Encore, spread throughout the northern residential areas of the city. Also evidence against an Encore relationship: the trend continued during the COVID closures in the spring.

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.

Bad Checks

This is definitely one to watch for a casino relationship. Half of the incidents have come from area banks.

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). However, see the drunk driving section later in this report for more evidence of a potential increase in Everett.

Selected calls for service in Everett

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Abandoned Vehicle	37	1	C	25-49	34	Expected
Disabled Vehicle	12	0	C	8-16	11	Expected
Domestic Dispute	4	0	C	2-6	0	Low

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Drugs	6	0	C	3-9	6	Expected
General Service	87	-1	C	66-108	82	Expected
Gunshots	3	0	C	1-7	1	Expected
Liquor	2	0	C	0-4	0	Expected
Lost Property	11	-1	T	10-18	8	Low
Medical	182	-1	C	171-193	176	Expected
Overdose	9	0	C	5-13	10	Expected
Psychological	4	0	C	3-5	6	High
Recovered Vehicle	1	0	C	0-3	1	Expected
Suspicious Activity	67	-1	C	46-88	58	Expected
Traffic Collision	107	2	T	73-116	80	Expected
Traffic Complaint	124	-2	C	99-149	120	Expected

Everett's increase during this period was only in the "psychological" category and only by one.

Collisions in Everett

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Vehicle in Traffic	122	7	T	110-188	179	Expected
Parked Vehicle	44	3	T	43-66	63	Expected
Pedestrian	15	-1	C	9-21	18	Expected
Bicyclist	5	0	C	3-7	7	Expected
Animal	0	0	C	0-0	0	Expected
Fixed Object	19	1	C	14-24	19	Expected
Curb/Barrier/Embankment	3	0	T	3-6	7	High
Rollover/Jackknife	1	0	C	0-2	0	Expected
Other/Unknown	9	0	T	5-10	10	Expected
Total	218	10	T	201-313	303	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.

8-month analysis: Boston/Charlestown



Population (est. 2016): 17,201
Area: 24.2 square miles
Police officers: 2,143 (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 eight months post-Encore, crime totals were normal in the neighborhood, but certain property crimes showed increases. These are discussed below. Because of a change to a new records management system, we do not currently have accurate call-for-service or collision data for Boston.

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.

Crimes in Boston/Charlestown³

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Murder	0	0	C	0-1	0	Expected

³ 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 Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Sexual Assault	5	1	C	1-9	1	Expected
Kidnapping	0	0	C	0-1	1	Expected
Robbery	16	-1	T	7-20	2	Low
Aggravated Assault	32	0	C	22-42	41	Expected
Simple Assault	84	-1	C	68-100	97	Expected
Threats	39	-5	T	18-41	41	Expected
Arson	0	0	C	0-0	0	Expected
Burglary	28	-3	C	10-46	15	Expected
Theft from Persons	1	0	C	0-2	0	Expected
Purse-Snatching	1	0	C	0-2	0	Expected
Shoplifting	14	1	C	5-24	7	Expected
Theft from Building	40	0	C	31-49	33	Expected
Theft from Machine	0	0	T	0-0	0	Expected
Theft from Vehicle	50	-7	T	20-58	72	High
Theft of MV Parts	14	-2	T	3-16	12	Expected
Other Theft	48	-1	C	39-57	53	Expected
Auto Theft	20	-2	T	9-20	22	High
Forgery	3	0	T	2-8	2	Expected
Fraud	23	-3	T	11-25	35	High
Credit Card Fraud	6	2	T	3-19	8	Expected
Identity Theft	4	2	T	6-18	2	Low
Employee Theft	1	0	C	0-3	3	Expected
Stolen Property	3	0	T	0-4	3	Expected
Vandalism	83	-5	T	43-81	72	Expected
Drugs	46	3	C	27-65	33	Expected
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	2	0	C	0-4	1	Expected
Prostitution	0	0	C	0-0	0	Expected
Weapons	6	0	C	1-11	2	Expected
Bad Checks	0	0	C	0-0	0	Expected
Disorderly	6	-1	T	2-7	4	Expected
Drunk Driving	3	0	C	1-5	4	Expected
Drunkenness	0	0	T	0-1	0	Expected
Family Offenses	17	1	T	13-29	20	Expected
Liquor Laws	1	0	C	0-2	0	Expected
Runaway	0	0	C	0-1	0	Expected
Trespassing	8	-1	T	3-11	7	Expected
Violent Total	176	-7	C	116-213	183	Expected
Property Total	338	-17	T	182-359	339	Expected
Total	603	-24	T	397-618	593	Expected

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

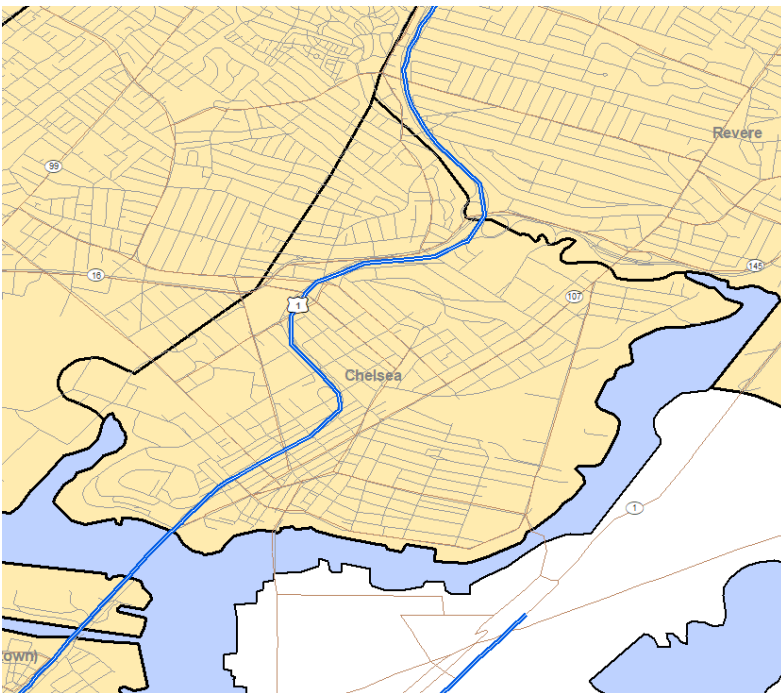
Auto theft

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.

8-month analysis: Chelsea



Population (est. 2019): 40,496

Area: 2.5 square miles

Police officers: 107

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 eight 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 2019- Feb 2020	Result
Murder	2	0	C	0-4	0	Expected
Sexual Assault	38	1	C	28-48	32	Expected
Kidnapping	9	0	C	5-13	10	Expected
Robbery	103	-17	T	34-56	49	Expected
Aggravated Assault	161	-18	T	92-136	156	High
Simple Assault	452	-20	T	333-410	364	Expected
Threats	210	-17	T	134-194	154	Expected
Arson	2	0	T	0-3	0	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Burglary	109	-21	T	43-59	58	Expected
Theft from Persons	15	-3	T	3-13	5	Expected
Purse-Snatching	7	-1	C	1-16	7	Expected
Shoplifting	93	-5	C	67-119	35	Low
Theft from Building	105	-6	C	72-138	62	Low
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	119	-16	T	58-116	89	Expected
Theft of MV Parts	27	2	C	7-47	1	Low
Other Theft	100	-37	T	37-93	92	Expected
Auto Theft	83	-12	T	34-77	48	Expected
Forgery	19	-2	T	6-19	18	Expected
Fraud	62	-2	C	41-83	39	Low
Credit Card Fraud	20	0	C	15-25	2	Low
Identity Theft	38	-3	T	22-38	28	Expected
Employee Theft	3	0	C	2-4	0	Low
Stolen Property	23	-2	C	20-26	19	Low
Vandalism	365	-45	T	193-225	215	Expected
Drugs	61	-8	T	24-54	41	Expected
Drug Equipment	1	0	C	0-2	1	Expected
Statutory Rape	4	2	T	3-16	25	High
Gambling	1	0	T	0-5	3	Expected
Pornography	3	1	C	0-7	4	Expected
Prostitution	9	-1	C	3-15	0	Low
Weapons	47	-5	T	20-47	30	Expected
Bad Checks	7	0	C	3-11	0	Low
Disorderly	61	-10	T	26-45	34	Expected
Drunk Driving	31	0	C	17-45	31	Expected
Drunkenness	165	-9	T	110-174	126	Expected
Family Offenses	1	0	T	0-5	0	Expected
Liquor Laws	33	1	C	24-42	39	Expected
Runaway	1	0	C	0-3	0	Expected
Trespassing	45	-2	C	33-57	29	Low
Violent Total	975	-72	T	626-861	765	Expected
Property Total	1190	-165	T	571-663	718	High
Total	2635	-269	T	1470-1705	1846	High

Chelsea's crime total has dropped so much in the past 8 years that the 2020 figures for property crime and total crime register as "high" even though they're the second-lowest in at least 10 years (2019 was slightly lower). The totals 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. Suspects are mostly locals from Chelsea.

Selected calls for service in Chelsea

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Abandoned Vehicle	41	0	C	27-55	17	Low
Disabled Vehicle	135	0	C	98-172	100	Expected
Domestic Dispute	437	-35	T	259-340	354	High
Drugs	165	-16	C	82-248	111	Expected
General Service	583	-37	C	364-802	542	Expected
Gunshots	31	8	T	27-68	77	High
Liquor	58	6	T	73-93	41	Low
Lost Property	21	3	T	30-34	25	Low
Medical	705	-8	C	504-906	469	Low
Psychological	212	10	T	197-304	247	Expected
Recovered Vehicle	60	-11	T	23-49	29	Expected
Suspicious Activity	927	-72	T	455-884	464	Expected
Traffic Collision	981	30	T	1001-1200	1102	Expected
Traffic Complaint	765	104	T	814-1545	959	Expected

Domestic disputes

A high February 2020 pushed this incident type above its expected window. There are a handful of incidents at the Marriott Residence Inn, and between 5 and 7 each at a selection of apartment complexes.

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 9 reports of gunshots from an average of 14.

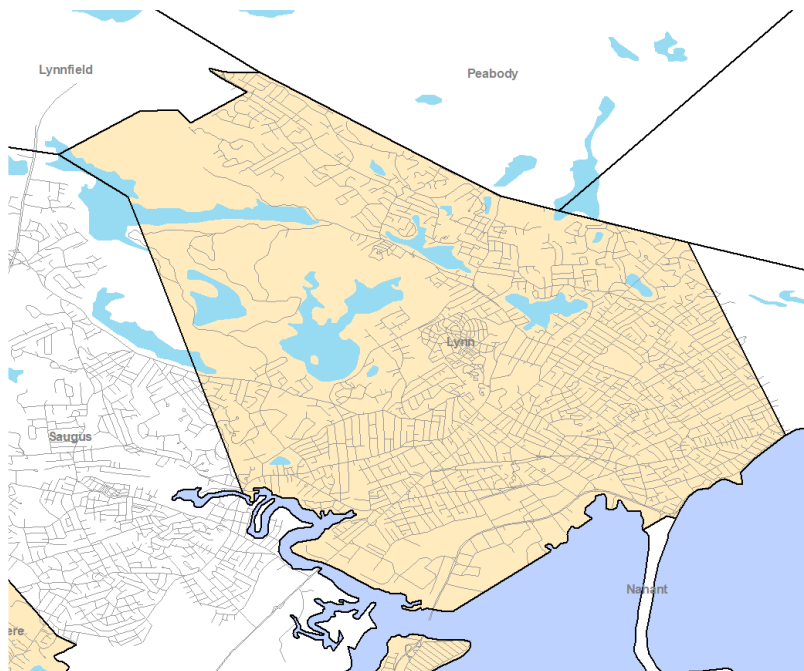
Collisions in Chelsea

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Vehicle in Traffic	297	7	C	247-347	342	Expected
Parked Vehicle	152	-16	T	77-126	103	Expected
Pedestrian	33	-2	C	24-42	36	Expected
Bicyclist	6	0	C	3-9	3	Expected
Animal	0	0	C	0-1	0	Expected
Fixed Object	29	1	C	18-40	24	Expected
Curb/Barrier/Embankment	9	1	C	5-13	2	Low
Rollover/Jackknife	1	0	C	0-2	0	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Other/Unknown	10	-1	C	3-17	5	Expected
Total	537	-11	T	428-558	515	Expected

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.

8-month analysis: Lynn



Population (est. 2019): 94,449
Area: 13.5 square miles
Police officers: 168
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 2019- Feb 2020	Result
Murder	3	0	C	1-5	6	High
Sexual Assault	57	-1	C	45-69	42	Low
Kidnapping	8	0	C	4-12	6	Expected
Robbery	117	-5	T	69-124	77	Expected
Aggravated Assault	290	-12	T	187-296	202	Expected
Simple Assault	549	-25	T	358-576	507	Expected
Threats	63	-1	C	53-73	67	Expected
Arson	5	-1	C	2-8	2	Expected
Burglary	280	-42	T	104-159	152	Expected
Theft from Persons	30	0	C	22-38	33	Expected
Purse-Snatching	0	0	C	0-0	0	Expected
Shoplifting	103	-8	T	48-126	81	Expected
Theft from Building	38	-3	T	19-47	57	High

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	227	-22	T	126-197	167	Expected
Theft of MV Parts	9	-2	T	2-9	3	Expected
Other Theft	564	-49	T	302-496	410	Expected
Auto Theft	174	-6	C	121-227	105	Low
Forgery	36	-6	T	14-23	29	High
Fraud	96	-7	T	60-91	84	Expected
Credit Card Fraud	40	1	C	28-52	58	High
Identity Theft	24	1	T	23-35	29	Expected
Employee Theft	1	0	C	0-1	0	Expected
Stolen Property	0	0	T	0-2	2	Expected
Vandalism	572	-46	T	315-545	360	Expected
Drugs	169	-15	T	78-173	134	Expected
Drug Equipment	0	0	C	0-0	0	Expected
Statutory Rape	5	0	C	2-8	11	High
Gambling	1	0	C	0-2	0	Expected
Pornography	4	1	T	1-13	4	Expected
Prostitution	26	-10	T	2-11	12	High
Weapons	56	0	C	42-70	63	Expected
Bad Checks	0	0	C	0-0	0	Expected
Disorderly	113	-8	T	54-125	100	Expected
Drunk Driving	73	1	C	57-89	89	Expected
Drunkenness	0	0	C	0-0	0	Expected
Family Offenses	109	-8	T	72-118	88	Expected
Liquor Laws	22	0	C	16-28	39	High
Runaway	0	0	C	0-0	0	Expected
Trespassing	77	-1	C	50-104	58	Expected
Violent Total	1087	-45	T	717-1155	907	Expected
Property Total	2200	-192	T	1191-1844	1572	Expected
Total Crimes	3942	-276	T	2247-3568	3077	Expected

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

Murder

Lynn unfortunately saw an increase in deadly violence during this period. To wit:

- **19 August 2019:** Two homeless people, a 34-year-old woman and a 36-year-old man, got into a fight. The woman ended up stabbing the man and was later arrested.
- **24 August 2019:** Two Lynn men fired recklessly into a playground on Warren Street, hitting four people and killing one. They were later arrested.
- **11 October 2019:** A 63-year-old woman was stabbed to death in her home on West Neptune Street. Lynn Police have said publicly only that the crime is not random.

- **8 November 2019:** One homeless man beat another to death on Liberty Street.
- **4 January 2020:** A 25-year-old man from Worcester was shot at an apartment party. Lynn Police got a warrant for a 34-year-old Lynn man; he was later arrested in Maine.
- **24 February 2020:** A 34-year-old Lynn man was shot and killed and another man injured. The circumstances are unknown.

Overall, the Lynn murders during this period seem to involve local residents with local problems.

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.

Forgery

There was a big increase in this crime during the first two months of 2020, unfortunately spread out at a variety of locations. The few incidents with identified suspects have them all local (from Lynn or Revere). Given the lack of corroborative increases in other communities, I will regard it as a local pattern, unrelated to Encore, unless I receive further information from the Lynn Police.

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 eight month period, at a variety of location types. A good portion are at residences, suggesting online fraud.

Statutory rape

A disturbing increase, but all of the incidents occurred at local residences or schools and almost all of the suspects are from Lynn, suggesting no connecting to Encore.

Prostitution

All but one of the incidents have occurred on streets, indicating streetwalking rather than motel- or house-based prostitution. All incidents have been on Green or Union Streets. Listed suspects are all female, and all from Lynn. My reading of the data is that the Lynn Police have been more aggressive about enforcing streetwalking, and the increase is thus related to police proactivity rather than an actual increase in prostitution.

Liquor laws

A fairly heavy increase in liquor law violations involve incidents scattered all over town, at all times of day, all days of the week, and no location types listed. I cannot find a logical tie to Encore, particularly this far distant from the casino, but I'm otherwise not sure what to make of the trend.

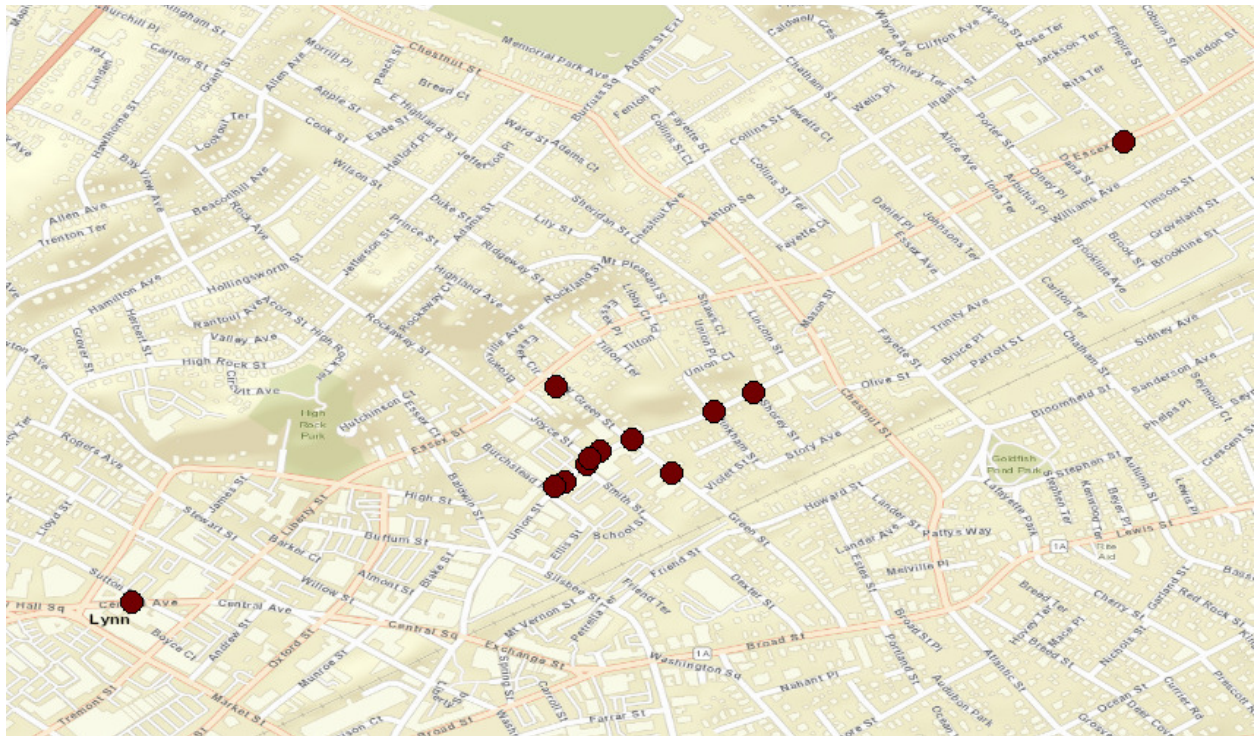


Figure 8: Lynn arrests for prostitution this period were focused heavily on the intersection of Union and Green Streets.

Selected calls for service in Lynn

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Disabled Vehicle	608	-27	C	433-783	407	Low
Domestic Dispute	517	-45	T	263-449	379	Expected
Drugs	169	7	C	120-218	126	Expected
General Service	533	-1	C	488-578	506	Expected
Gunshots	107	0	C	94-120	99	Expected
Liquor	329	-36	T	146-265	211	Expected
Lost Property	270	-1	C	237-303	240	Expected
Medical	5951	138	T	6138-6871	6169	Expected
Overdose	185	40	T	279-379	254	Low
Psychological	255	15	T	286-344	189	Low
Recovered Vehicle	71	-7	T	29-86	32	Expected
Suspicious Activity	1042	-30	C	886-1198	880	Low
Traffic Collision	2226	43	T	2112-2687	2109	Low
Traffic Complaint	2148	37	C	1674-2622	1823	Expected
Vagrancy	113	2	C	96-130	132	High

Lynn's only call-for-service increase during this period was for **vagrancy**. Reports of panhandling increased in particular on Boston Street and State Street.

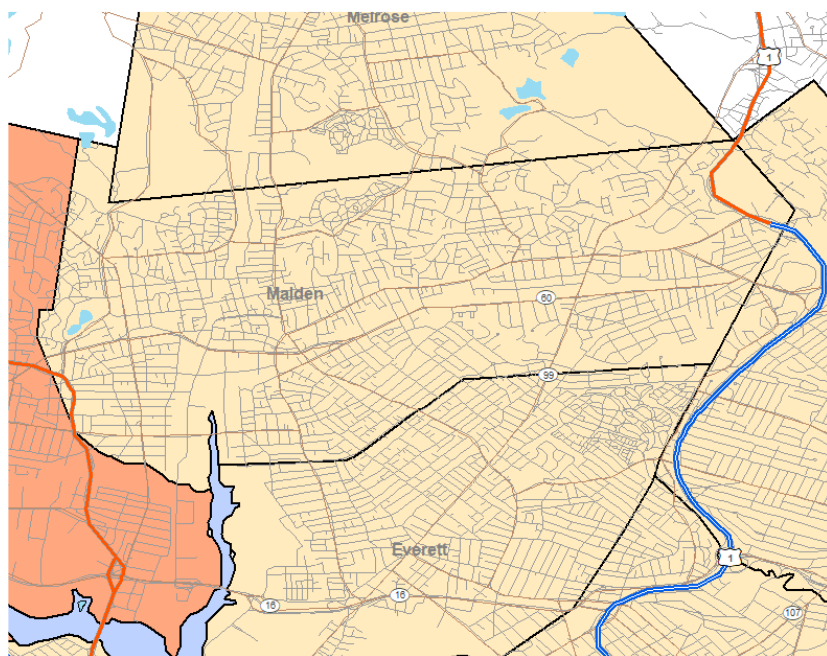
Collisions in Lynn

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Vehicle in Traffic	1527	-24	C	1254-1800	1115	Low
Parked Vehicle	7	0	C	3-11	3	Expected
Pedestrian	101	8	T	86-178	104	Expected
Bicyclist	4	-1	C	1-7	4	Expected
Animal	2	0	C	1-3	1	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	96	-13	T	39-81	36	Low
Total	1737	-29	C	1430-2044	1263	Low

Lynn's crash totals during this eight-month period were the lowest in at least a decade, 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

Malden was unable to participate in this report. To show some of the trends the city was experiencing as of the end of the first six months of Encore operations (July–December 2019), I have left those statistics intact. The statistics below were not included in the overall totals for the participating area.



Population (est. 2019): 60,746

Area: 5.1 square miles

Police officers: 100

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 2019- 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

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

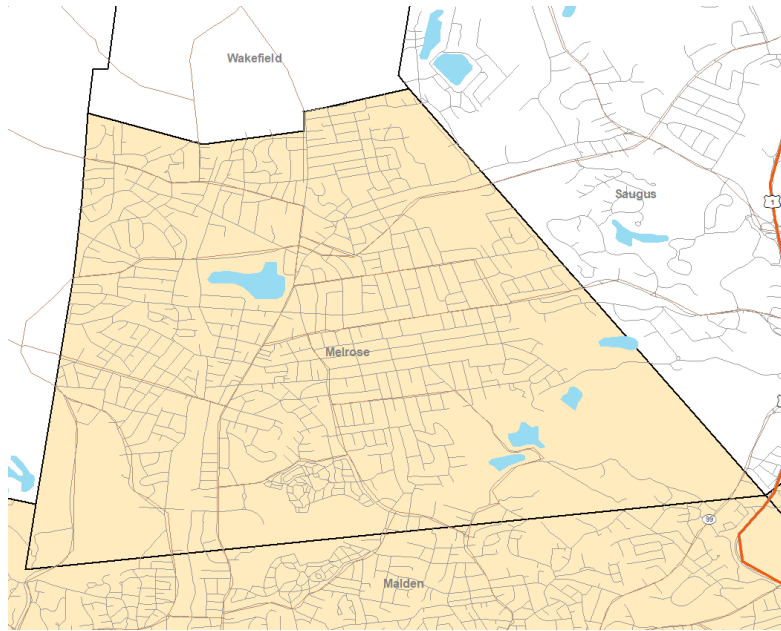
All selected call-for-service categories were within expected ranges in the latter half of 2019.

Collisions in Malden

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- 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	0	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.

8-month analysis: Melrose



Population (est. 2019): 28,120

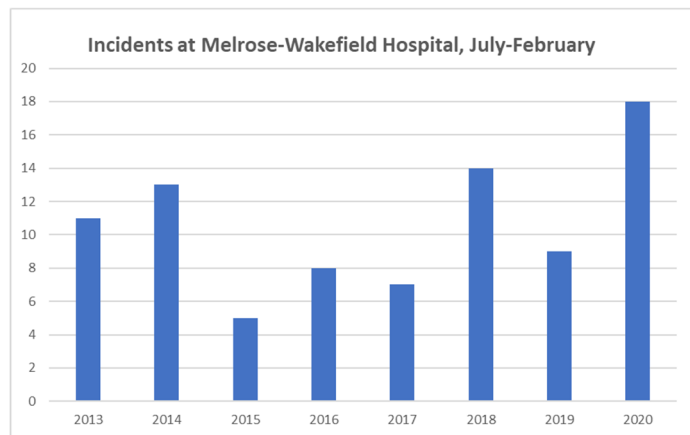
Area: 4.8 square miles

Police officers: 48

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 lacks 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.

One potential exception is in activity at Melrose-Wakefield Hospital, a possible destination for medical emergencies at Encore Boston Harbor. This facility did see an increase in crimes during this period, from an average of 10 to a 2020 total of 18. It's not a lot of cases, but it still may be indicative of an Encore-related increase. The 2020 figures included five simple assaults, two auto thefts, three incidents of fraud, and two drug incidents. Melrose will have to report on the possibility of any casino relationship among the responsible parties.



Crimes in Melrose

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019–Feb 2020	Result
Murder	0	0	C	0–0	0	Expected
Sexual Assault	2	0	C	1–3	0	Low
Kidnapping	1	0	C	0–1	1	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019– Feb 2020	Result
Robbery	4	-1	T	1–4	5	High
Aggravated Assault	12	1	C	7–17	16	Expected
Simple Assault	43	-3	T	23–47	47	Expected
Threats	20	-3	T	9–13	11	Expected
Arson	1	0	C	0–3	0	Expected
Burglary	27	-7	T	8–19	23	High
Theft from Persons	0	0	C	0–1	1	Expected
Purse-Snatching	1	0	T	0–3	0	Expected
Shoplifting	6	-1	T	2–8	0	Low
Theft from Building	25	-4	T	7–23	11	Expected
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	37	-4	C	10–66	32	Expected
Theft of MV Parts	1	0	C	0–2	0	Expected
Other Theft	62	-2	C	49–75	55	Expected
Auto Theft	14	0	C	7–23	10	Expected
Forgery	3	-1	C	1–6	3	Expected
Fraud	16	0	C	10–22	18	Expected
Credit Card Fraud	2	0	C	0–4	3	Expected
Identity Theft	4	0	C	3–5	5	Expected
Employee Theft	1	-1	T	0–2	0	Expected
Stolen Property	3	0	C	0–7	2	Expected
Vandalism	75	-4	T	50–76	54	Expected
Drugs	6	-1	T	2–9	10	High
Drug Equipment	0	0	C	0–0	2	High
Statutory Rape	1	0	C	0–2	1	Expected
Gambling	0	0	C	0–0	0	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	2	0	C	0–4	2	Expected
Disorderly	6	-1	T	2–9	8	Expected
Drunk Driving	5	-1	C	2–8	4	Expected
Drunkenness	7	-1	C	3–11	6	Expected
Family Offenses	0	0	C	0–0	0	Expected
Liquor Laws	2	0	C	0–6	1	Expected
Runaway	0	0	C	0–0	0	Expected
Trespassing	4	-1	T	0–5	2	Expected
Violent Total	82	-6	T	41–85	80	Expected
Property Total	278	-22	T	155–299	217	Expected
Total Crimes	394	-33	T	211–396	336	Expected

Robbery

Melrose was one of several Middlesex County agencies to see a series of armed robberies in the fall of 2019 committed by Ramfis Casado, 34, of Lynn, known as the “Red-Handed Bandit.” He is responsible for two convenience store robberies on West Wyoming Avenue on 23 November 2019 and 5 December 2019, plus other robberies in Everett, Malden, Waltham, and Woburn. To our knowledge, Casado had no casino or gambling-based motivations. A third convenience store robbery in February 2020 resulted in the arrests of two men from Cambridge.

Burglary

The city had an unusually high number of burglaries during this period, at least in comparison to its past trend. Most are at residences, scattered about town, with no commonalities that I can see. There is one potential pattern among them: two incidents at gas stations, about a mile apart, in January and February 2020. They were both on Monday nights, reported on Tuesday morning. Neither resulted in an arrest. In one incident, the burglar went for a safe.

Drugs and Drug Equipment

Melrose had slightly-higher-than-expected figures for both crimes during this period, with multiple arrests involving individuals from all over Massachusetts, including 5 arrests for possession of heroin. Of particular interest are two incidents at Melrose Wakefield Hospital involving offenders from Peabody and Rockland. As the hospital is one possible destination facility from Encore, we await Melrose’s report on whether any of the offenders had an Encore connection.

Selected calls for service in Melrose

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Abandoned Vehicle	4	0	C	1–7	1	Expected
Disabled Vehicle	35	2	C	25–45	38	Expected
Domestic Dispute	55	-5	T	27–56	34	Expected
General Service	704	20	T	664–906	743	Expected
Gunshots	1	0	C	0–2	0	Expected
Liquor	0	0	C	0–1	0	Expected
Lost Property	59	9	T	61–109	93	Expected
Medical	1001	43	T	1041–1303	1237	Expected
Overdose	13	0	C	7–19	11	Expected
Recovered Vehicle	2	0	C	1–3	0	Low
Suspicious Activity	330	8	C	271–389	388	Expected
Traffic Collision	400	-7	C	357–443	371	Expected
Traffic Complaint	461	95	T	599–1048	828	Expected

Melrose’s calls for service were also normal-to-low for the period. An increase in “suspicious activity” calls in November 2019 did not persist into the new year, and the category remained just within its expected range for the eight-month period as a whole.

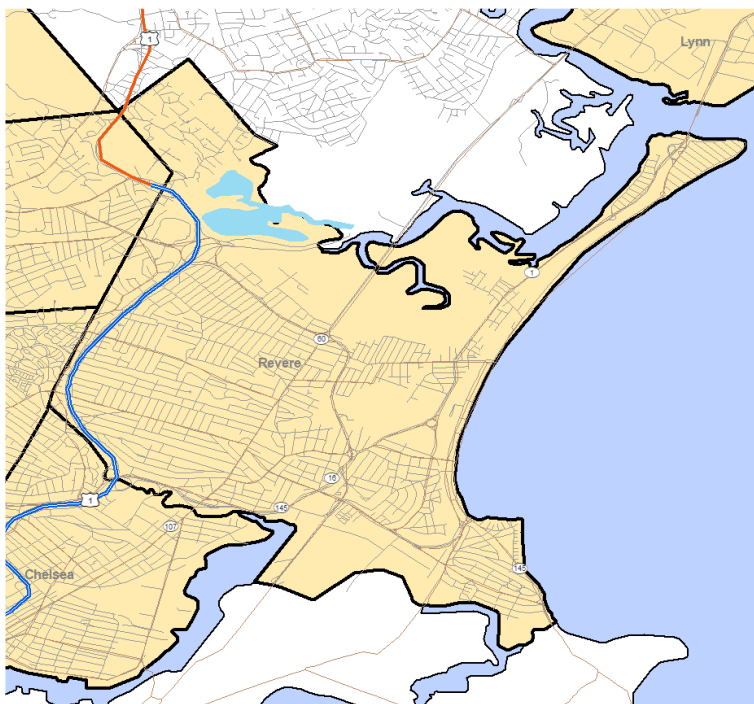
Collisions in Melrose

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Vehicle in Traffic	125	3	T	123–151	120	Low
Parked Vehicle	53	-2	C	42–64	57	Expected
Pedestrian	7	0	C	4–10	3	Low

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Bicyclist	2	0	C	0-4	1	Expected
Animal	0	0	C	0-0	0	Expected
Fixed Object	15	1	C	7-23	24	High
Curb/Barrier/Embankment	6	0	C	3-9	2	Low
Rollover/Jackknife	1	0	C	0-2	0	Expected
Other/Unknown	8	0	C	5-11	4	Low
Total	218	2	C	192-244	211	Expected

Total crashes were exactly average in Melrose. Some of the categories had lower-than-predicted figures, made up slightly by an increase in "fixed object" crashes. Other than three of these crashes in the 300-block of Main Street in December, there are no commonalities among them.

8-month analysis: Revere



Population (est. 2019): 53,654

Area: 10.0 square miles

Police officers: 106

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 2019- Feb 2020	Result
Murder	1	0	C	0-2	2	Expected
Sexual Assault	27	0	C	21-33	12	Low
Kidnapping	4	-1	T	1-5	2	Expected
Robbery	40	-4	T	20-35	29	Expected
Aggravated Assault	129	-1	C	116-142	76	Low
Simple Assault	279	-8	C	239-319	171	Low
Threats	149	-7	T	94-169	115	Expected
Arson	2	-1	T	0-3	0	Expected
Burglary	109	-14	T	50-95	45	Low
Theft from Persons	9	0	C	5-13	8	Expected
Purse-Snatching	8	-1	T	4-9	4	Expected
Shoplifting	137	10	T	109-243	106	Low
Theft from Building	68	-5	T	34-81	53	Expected
Theft from Machine	0	0	C	0-0	0	Expected
Theft from Vehicle	52	3	C	30-74	65	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Theft of MV Parts	4	1	C	0-8	2	Expected
Other Theft	270	-21	T	136-280	119	Low
Auto Theft	93	-11	T	49-75	41	Low
Forgery	18	-1	C	7-29	23	Expected
Fraud	65	-1	C	50-80	87	High
Credit Card Fraud	21	-4	T	2-21	8	Expected
Identity Theft	31	-1	T	22-33	20	Low
Employee Theft	4	-1	T	2-4	2	Expected
Stolen Property	22	0	C	13-31	14	Expected
Vandalism	266	-23	T	138-241	155	Expected
Drugs	60	-7	T	27-54	44	Expected
Drug Equipment	0	0	T	0-1	1	Expected
Statutory Rape	5	0	C	1-9	7	Expected
Gambling	1	0	C	0-2	2	Expected
Pornography	2	0	C	0-4	4	Expected
Prostitution	3	0	C	1-5	2	Expected
Weapons	17	-1	C	11-23	13	Expected
Bad Checks	11	-1	C	4-18	3	Low
Disorderly	58	-2	C	42-74	42	Expected
Drunk Driving	43	4	C	23-63	36	Expected
Drunkenness	46	-7	T	8-51	18	Expected
Family Offenses	1	0	C	0-3	2	Expected
Liquor Laws	11	2	T	10-21	19	Expected
Runaway	0	0	C	0-0	0	Expected
Trespassing	24	0	C	13-35	11	Low
Violent Total	629	-21	T	491-705	408	Low
Property Total	1179	-69	T	727-1134	752	Expected
Total Crimes	2090	-103	T	1291-2064	1364	Expected

Revere did very well during this period, ending the eight months with violent crime very low, and property crime at the lower end of the expected range. The only crime to see a significant increase was **fraud**. Target reported numerous incidents of price tampering and various con games were 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 2019-Feb 2020	Result
Abandoned Vehicle	92	8	T	88-158	58	Low
Disabled Vehicle	240	12	C	162-318	263	Expected
Domestic Dispute	402	49	T	467-725	547	Expected
General Service	840	14	C	671-1009	650	Low
Gunshots	21	7	T	21-69	49	Expected
Liquor	10	-1	C	0-22	1	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Lost Property	77	8	T	87-123	99	Expected
Medical	403	143	T	618-1173	789	Expected
Overdose	77	19	T	68-168	3	Low
Psychological	6	0	C	3-9	1	Low
Recovered Vehicle	50	-11	T	20-32	40	High
Suspicious Activity	823	56	T	829-1263	775	Low
Traffic Collision	1159	94	T	1401-1671	1393	Low
Traffic Complaint	717	95	T	931-1259	883	Low

Revere showed some extremely low call-for-service categories during this period. The major exception was in the category of recovered stolen vehicles, which had been trending downward, hitting an all-time low of 26 in 2019. This is the kind of incident that we specifically wanted to watch for, as any large facility can cause visitors to bring stolen cars to the area and drop them off. However, we see no corroborative increases in this category from other communities, and geographically the recoveries don't make much sense if the drivers were going to hop a bus or train to Encore (see map). An analysis from the Revere Police as to the origins of these cars would be interesting.

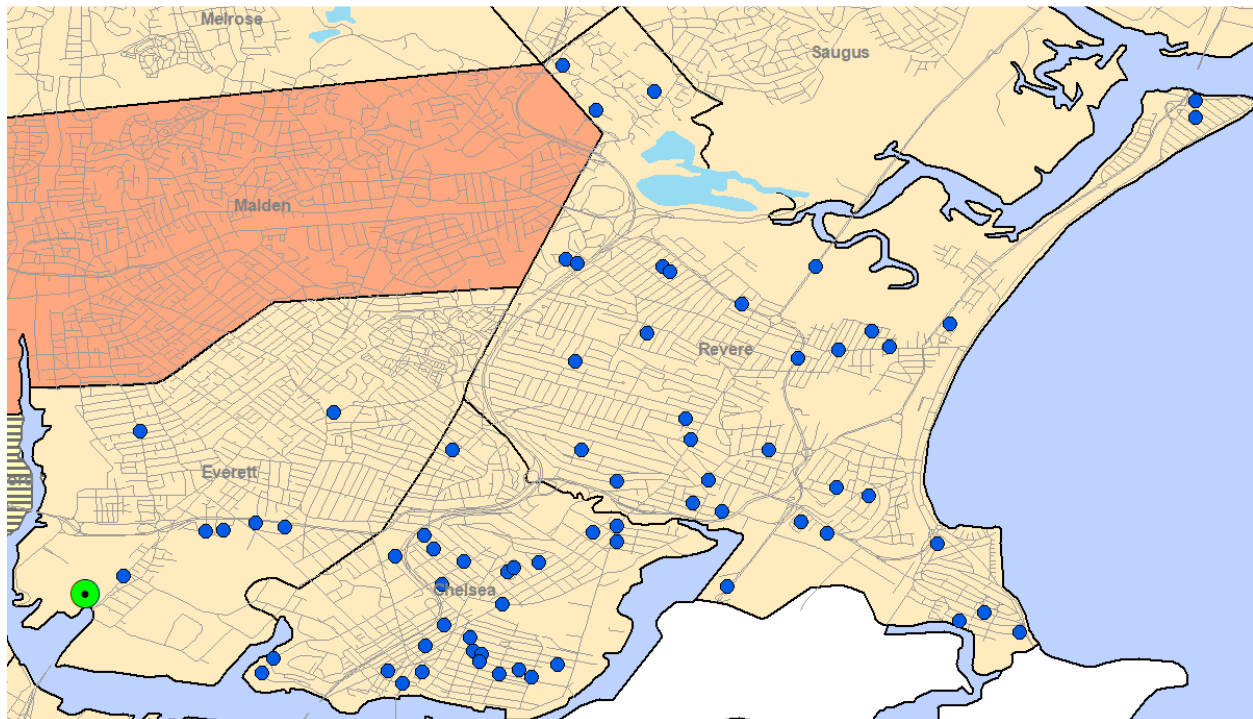


Figure 9: Recovered stolen cars in the 8 months after Encore opened. Only Revere's totals are above expected volume.

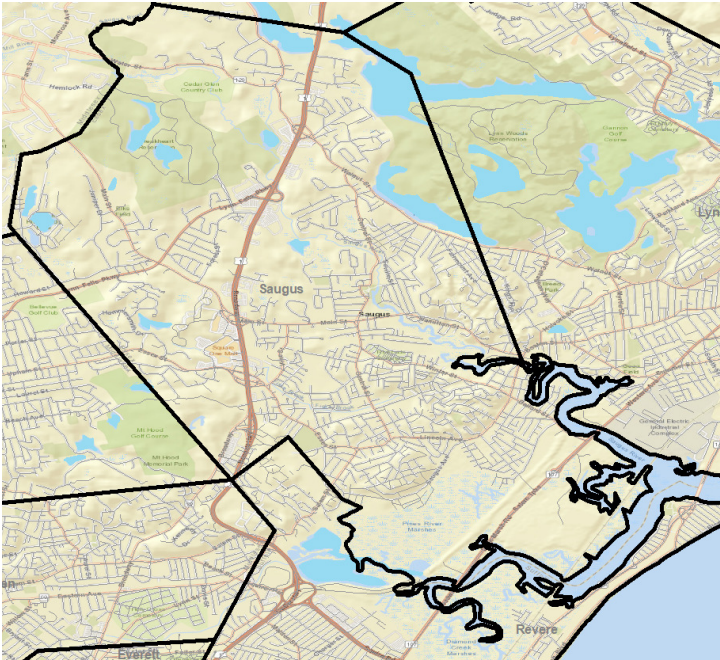
Collisions in Revere

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Vehicle in Traffic	269	11	C	217-321	227	Expected
Parked Vehicle	56	4	T	59-88	74	Expected
Pedestrian	25	-1	C	19-31	22	Expected
Bicyclist	6	0	C	3-9	3	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Animal	0	0	C	0-1	0	Expected
Fixed Object	34	1	C	24-44	43	Expected
Curb/Barrier/Embankment	25	3	T	26-45	13	Low
Rollover/Jackknife	2	0	C	0-5	4	Expected
Other/Unknown	13	-1	C	9-17	9	Expected
Total	430	18	T	403-581	395	Low

Collisions in Revere had increased steadily since 2015 but they reversed course in 2019–2020, ending not only below the trendline for the period but also below the 8-month average. If Encore Boston Harbor occasioned an increase in traffic in the region, it is not being reflected in collisions on Revere roads.

8-month analysis: Saugus



Population (est. 2019): 28,378

Area: 11.8 square miles

Police officers: 59

City center distance to Encore: 5.72 miles

Saugus is a small residential city bisected by a massive commercial corridor. It is only shortly before its borders that Interstate 95 travelers headed to Boston (including Encore) exit the highway onto Route 1. The route this traffic takes through Saugus is some of the mostly densely-packed commercial territory in the state, including a major shopping mall (Square One), a major shopping center, and dozens of department stores, restaurants, gas stations, and other retail and service outlets. These establishments do not continue much beyond the city's southern border; in Malden, Route 1 becomes a controlled-access freeway. Thus, Saugus is poised to see an increase in activity from travelers to and from Encore from northern points.

Crimes in Saugus

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Murder	0	0	C	0-0	1	High
Sexual Assault	6	-1	C	3-9	13	High
Kidnapping	1	0	C	0-2	0	Expected
Robbery	10	0	C	5-16	6	Expected
Aggravated Assault	31	2	T	29-47	26	Low
Simple Assault	66	-1	C	55-77	55	Expected
Threats	23	1	C	17-29	31	High
Arson	1	0	T	0-1	1	Expected
Burglary	41	-5	T	18-24	16	Low
Theft from Persons	2	0	C	0-4	0	Expected
Purse-Snatching	2	0	C	1-3	1	Expected
Shoplifting	98	-12	T	38-108	67	Expected
Theft from Building	18	-2	T	10-19	13	Expected
Theft from Vehicle	57	-7	T	26-45	37	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Theft of MV Parts	1	0	T	1-4	1	Expected
Other Theft	191	-22	T	58-182	78	Expected
Auto Theft	27	-1	C	21-33	23	Expected
Forgery	15	-1	C	6-24	15	Expected
Fraud	38	-2	C	28-48	56	High
Credit Card Fraud	25	-2	T	14-22	5	Low
Identity Theft	29	1	C	20-38	26	Expected
Employee Theft	3	0	T	1-3	0	Low
Stolen Property	10	-2	C	7-13	11	Expected
Vandalism	140	-11	T	82-122	82	Expected
Drugs	24	-3	T	11-26	22	Expected
Drug Equipment	0	0	C	0-0	0	Expected
Statutory Rape	2	0	C	0-4	1	Expected
Gambling	0	0	T	0-1	0	Expected
Pornography	1	0	T	0-2	0	Expected
Prostitution	1	0	C	0-2	0	Expected
Weapons	8	0	C	4-12	6	Expected
Bad Checks	6	-2	T	0-3	0	Expected
Disorderly	8	-2	T	1-9	8	Expected
Drunk Driving	18	2	T	15-37	23	Expected
Drunkenness	12	-1	C	6-18	4	Low
Family Offenses	0	0	T	0-0	0	Expected
Liquor Laws	5	0	C	2-8	1	Low
Runaway	1	0	C	0-4	0	Expected
Trespassing	7	-1	C	4-10	2	Low
Violent Total	137	1	C	109-180	132	Expected
Property Total	699	-67	T	344-541	432	Expected
Total Crimes	928	-72	T	523-756	631	Expected

Murder

Saugus had a single homicide during this period, unusual for the agency, but it involved two brothers-in-law with a long history of feuds. One shot the other while he was working at a gas station and then shot himself in his car. There is no Encore relationship.

Sexual Assault

An unusually high number, but mostly at local residences and schools, which would suggest a non-Encore cause. Saugus Police may want to check if their records management system is properly coding some charges, as based on the charges, some of the incidents may be indecent exposure instead of sexual assault.

Threats

Saugus is the only agency to see an increase in this category. The increase was mostly at residences involving local victims and suspects.

Fraud

The increase includes a mix of confidence scams and miscoded credit card fraud at a variety of businesses, particularly on Route 1. Most of the suspects have been from Saugus itself, but a narrative review of the incidents along Broadway (Route 1), particularly at gas stations, is warranted to look for any potential connection.

Selected calls for service in Saugus

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Abandoned Vehicle	1	0	C	0-1	0	Expected
Disabled Vehicle	17	0	C	7-27	18	Expected
Drugs	0	0	C	0-1	0	Expected
General Service	14	0	C	10-18	10	Expected
Gunshots	1	0	C	0-3	3	Expected
Liquor	3	0	C	1-5	1	Expected
Lost Property	2	0	C	1-3	2	Expected
Medical	23	0	C	19-27	19	Expected
Overdose	7	0	C	3-11	9	Expected
Psychological	14	0	C	9-19	17	Expected
Recovered Vehicle	2	0	C	0-4	1	Expected
Suspicious Activity	57	0	C	42-72	57	Expected
Traffic Collision	83	2	T	53-91	84	Expected
Traffic Complaint	17	0	C	11-23	4	Low

All call categories in Saugus were low or expected for this period.

Collisions in Saugus

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Vehicle in Traffic	191	12	T	204-270	238	Expected
Parked Vehicle	35	2	T	33-48	41	Expected
Pedestrian	7	-1	C	4-10	18	High
Bicyclist	2	0	C	1-3	4	High
Animal	1	0	C	0-2	1	Expected
Fixed Object	37	0	C	27-47	40	Expected
Curb/Barrier/Embankment	17	1	C	11-23	15	Expected
Rollover/Jackknife	2	0	C	1-3	1	Expected
Other/Unknown	13	0	C	5-21	4	Low
Total	305	13	T	301-414	362	Expected

Saugus showed increases in the only two collision categories that we wouldn't expect to be related to Encore--pedestrian and bicyclist. Although a small number are in Route 1 parking lots, most are in the residential area of east Saugus, centered on Central Street.

8-month analysis: Somerville



Population (est. 2019): 81,668

Area: 4.2 square miles

Police officers: 127

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 related 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 2019- Feb 2020	Result
Murder	0	0	C	0–1	0	Expected
Sexual Assault	30	0	C	23–37	35	Expected
Kidnapping	4	-1	C	1–7	5	Expected
Robbery	34	-3	T	16–39	22	Expected
Aggravated Assault	82	0	C	65–99	88	Expected
Simple Assault	146	1	C	120–172	155	Expected
Threats	26	-2	C	10–45	19	Expected
Arson	5	-1	C	1–13	1	Expected
Burglary	173	-24	T	94–148	76	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	44	3	C	28–60	49	Expected
Theft from Machine	0	0	C	0–0	0	Expected
Theft from Vehicle	192	-33	T	95–169	125	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Theft of MV Parts	1	0	C	0-1	0	Expected
Other Theft	367	-25	T	213-410	329	Expected
Auto Theft	77	0	C	68-86	62	Low
Forgery	21	2	C	12-30	26	Expected
Fraud	82	4	C	60-104	92	Expected
Credit Card Fraud	28	5	T	21-54	37	Expected
Identity Theft	77	10	C	27-127	64	Expected
Employee Theft	0	0	C	0-1	1	Expected
Stolen Property	0	0	C	0-0	0	Expected
Vandalism	196	-15	T	115-184	144	Expected
Drugs	48	0	C	38-58	36	Low
Drug Equipment	0	0	C	0-0	0	Expected
Statutory Rape	2	-1	T	0-3	5	High
Gambling	0	0	C	0-0	0	Expected
Pornography	2	0	C	0-4	7	High
Prostitution	3	0	C	1-5	0	Low
Weapons	25	1	C	19-31	30	Expected
Bad Checks	0	0	C	0-0	0	Expected
Disorderly	54	-5	T	33-41	31	Low
Drunk Driving	24	1	C	17-31	18	Expected
Drunkenness	0	0	C	0-0	0	Expected
Family Offenses	31	-4	T	18-25	21	Expected
Liquor Laws	12	-1	C	7-17	6	Low
Runaway	0	0	C	0-0	0	Expected
Trespassing	15	2	T	15-28	12	Low
Violent Total	322	-5	C	235-400	324	Expected
Property Total	1266	-75	T	834-1240	1006	Expected
Total Crimes	1803	-87	T	1234-1792	1496	Expected

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

Statutory Rape

Somerville took a high number of these reports in September and October of 2019. They did not occur in location types (like hotels) that would appeal to out-of-town visitors, and all suspects listed are local except one. Because we collect limited data on sexual offenses, Somerville Police will have to report if any of the suspects has a casino connection.

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. As with other sexual offenses, the data collected does not provide enough to determine the cause of the trend without police input. {SPD: 20000879, 19065010, 19059325, 19059196, 19056934, 19043371, 19042051.}

Selected calls for service in Somerville

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Abandoned Vehicle	16	-1	C	9-23	18	Expected
Disabled Vehicle	137	9	T	150-194	163	Expected
Domestic Dispute	391	-22	T	249-367	322	Expected
Drugs	27	-3	T	12-34	32	Expected
General Service	1342	4	C	1141-1543	1224	Expected
Gunshots	28	1	C	18-38	35	Expected
Liquor	255	-31	T	105-236	220	Expected
Lost Property	218	-12	T	118-238	159	Expected
Medical Aid	3384	-70	T	2915-3572	3268	Expected
Overdose	71	-6	C	48-94	53	Expected
Psychological	230	23	T	275-370	301	Expected
Recovered Vehicle	70	-4	T	44-72	43	Low
Suspicious Activity	632	-16	C	501-763	548	Expected
Traffic Collision	1766	-69	C	1413-2119	1526	Expected
Traffic Complaint	1477	-19	C	1002-1952	1965	High

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 "TRESPTOW" code starting in 2016. If that code is removed, complaints fall within the normal range.

Collisions in Somerville

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Total	379	-2	C	324-434	349	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

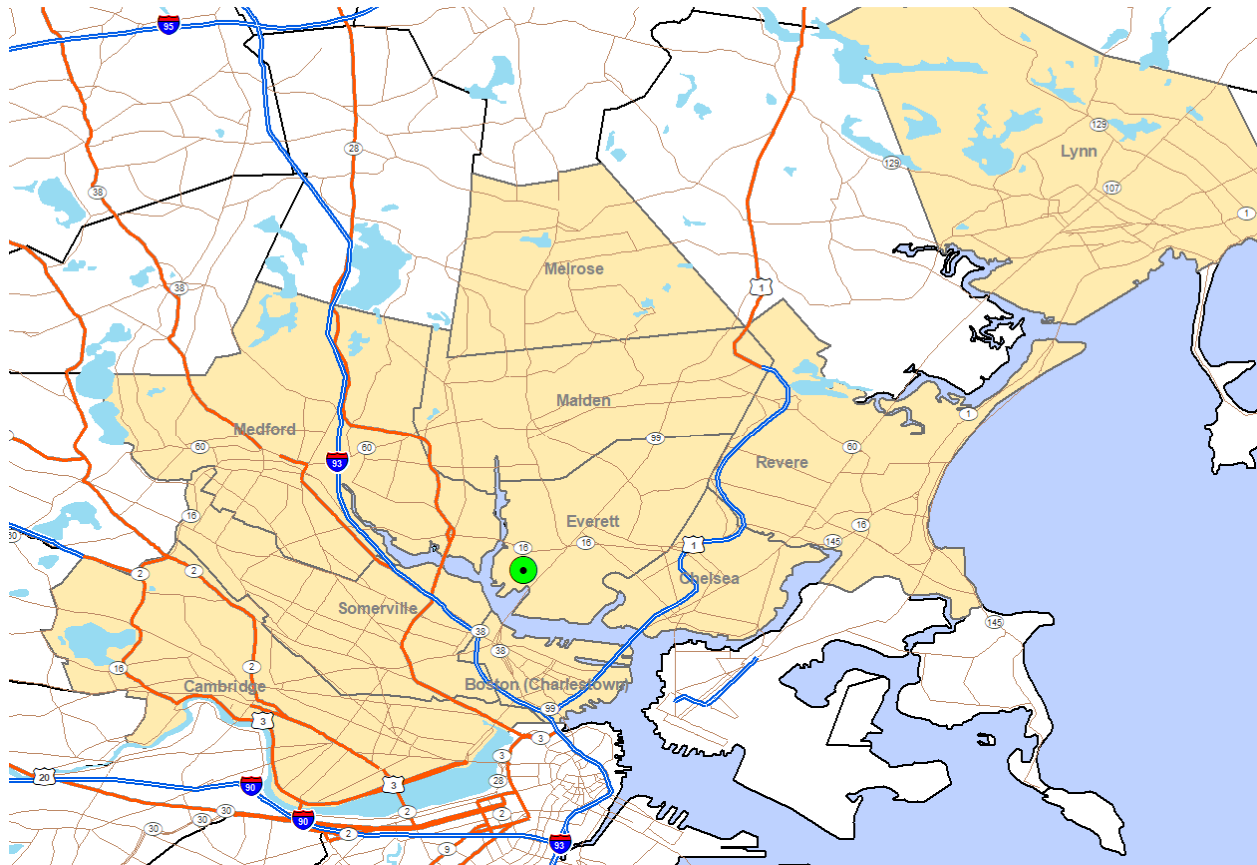


Figure 10: A network of State Police-patrolled highways and routes feeds the Encore Boston Harbor area.

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 2019-Feb 2020	Result
911 Hangup or Error	2	0	C	0-4	18	High
Abandoned Vehicle	10	0	C	7-13	24	High
Abduction	1	0	C	0-3	0	Expected
Administrative	2016	729	T	1971-6624	5242	Expected
Alarm	11	0	C	5-17	13	Expected
All Other	284	13	C	161-407	209	Expected
Animal Complaint	39	3	C	22-56	67	High
Arson	2	0	C	0-4	0	Expected
Assault	34	0	C	27-41	43	High
Assist Other Agency	284	18	T	279-436	333	Expected
Bomb Threat	3	-1	T	0-2	2	Expected
Building Check	4106	-152	C	2926-5286	2757	Low
Burglary	11	-2	T	4-10	9	Expected
Crime Enforcement	28	8	T	20-97	10	Low
Death	178	-1	C	151-205	201	Expected
Disabled Vehicle	1109	-40	C	898-1320	1162	Expected
Disorderly	153	-3	C	138-168	159	Expected
Domestic Dispute	11	0	C	6-16	14	Expected
Drugs	21	1	C	13-29	19	Expected
Field Interview	17	2	T	19-32	38	High
Fire	74	-3	T	41-83	53	Expected
Found Property	2	0	C	0-5	4	Expected
General Service	128	26	T	122-315	234	Expected
Gunshots	12	1	C	5-19	2	Low
Investigation	138	-5	C	111-165	213	High
Liquor	11	0	C	6-16	6	Expected
Lost Property	24	2	C	15-33	35	High
Medical	203	1	C	176-230	206	Expected
Missing Person	26	1	C	13-39	32	Expected
Municipal or Utility	111	-9	C	61-159	127	Expected
Other Theft	16	-4	T	3-13	12	Expected
Prisoner Transport	168	38	T	161-468	374	Expected
Psychological	10	0	C	3-17	14	Expected
Recovered Vehicle	37	-5	T	20-39	26	Expected
R.O. Violation	2	0	C	0-4	1	Expected
Road Conditions	233	2	C	179-287	296	High
Robbery	10	0	C	6-14	8	Expected
Suspicious Activity	72	1	C	57-87	104	High
Threats/Harassment	8	1	T	7-13	12	Expected
Traffic Collision	2517	72	T	2681-2927	2699	Expected
Traffic Complaint	479	14	C	335-623	631	High

Activity	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Traffic Enforcement	175	2	C	108–242	194	Expected
Traffic Offenses	39	-2	T	23–41	39	Expected
Trespassing	29	6	T	28–69	35	Expected
Vandalism	17	-2	T	9–18	15	Expected
Vehicle Stop	1929	-300	T	938–1189	1496	High
Warrant Service	51	-5	T	24–58	63	High
Weapons	3	-1	C	0–7	2	Expected
Well-Being Check	36	4	T	28–72	79	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.
- The **animal complaint** increase mostly involved “animal in road” in Revere and Medford.
- **Assaults** were particularly high in July 2019, but with no commonalities by location or time.
- Most of the reports of **lost property** came from Medford.
- The increase in **suspicious activity** calls came mostly from the Revere Beach area.

Crashes on state roadways

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Route 16	514	19	T	51	419	Expected
I-93	254	6	C	220–288	250	Expected
Route 28	254	0	C	233–275	212	Low
Route 1	237	8	T	215–324	248	Expected
Memorial Drive	142	-4	T	101–152	156	High
Route 1A	68	1	C	59–77	92	High
Lynnway	52	8	T	63–89	63	Expected
Mystic Avenue	66	5	T	63–103	81	Expected
Route 38	39	3	T	36–66	48	Expected
Alewife Brook Pkwy	88	0	C	71–105	63	Low
Revere Beach Blvd	35	1	T	34–47	45	Expected
McGrath Hwy	32	1	C	21–43	63	High
Route 145	29	3	T	28–51	41	Expected
Fresh Pond Pkwy	69	-2	C	58–80	50	Low
Msgr. O'Brien Hwy	44	0	C	36–52	42	Expected
Fellsway	111	7	T	114–165	158	Expected
Ocean Avenue	27	2	C	17–37	32	Expected
Route 2	45	-4	T	19–58	32	Expected
Lynn Fells Pkwy	27	3	T	22–49	29	Expected
Roosevelt Circle	60	0	C	45–75	86	High
All Others	322	15	T	339–422	389	Expected
Total	2517	72	T	2681–2928	2709	Expected

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. Overall totals were well within the expected range.

Spatial analysis

In interests of space, the statistics below do not include categories with fewer than 5 crimes on average unless the category was notably high in the associated region in the period ending February 2020.

Everett

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.

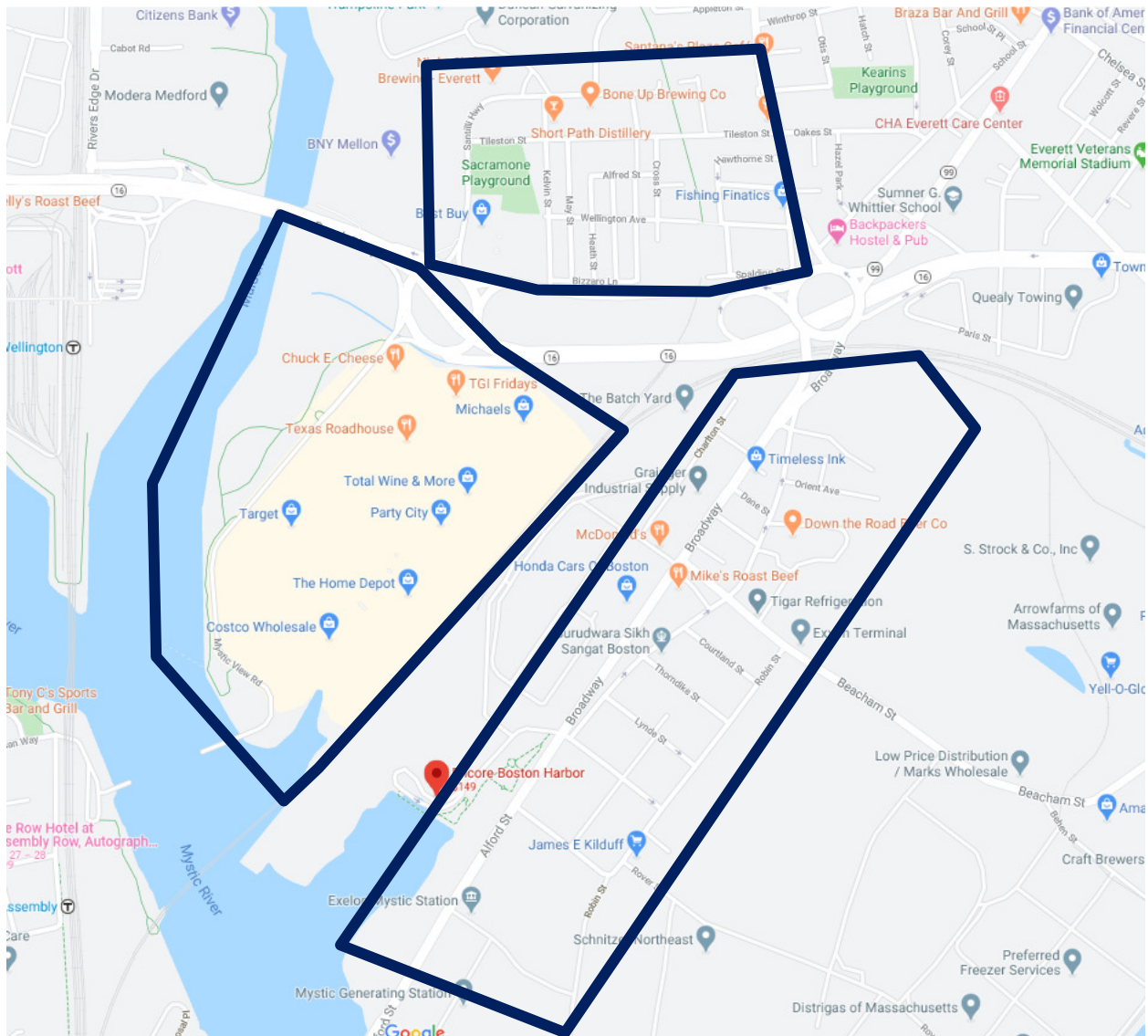


Figure 11: Three geographies around Encore Boston Harbor.

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 2019-Feb 2020	Result
Thefts from Vehicles	2	0	C	0-4	2	Expected
Shoplifting	34	0	C	22-46	34	Expected
Vandalism	2	0	C	0-5	3	Expected
Drug/Liquor Crimes	1	0	C	0-2	0	Expected
Violent Crime	3	0	C	1-5	4	Expected
Property Crime	52	1	C	38-66	51	Expected
Total Crime	57	2	C	43-71	59	Expected
Suspicious Activity	13	-1	T	5-16	10	Expected
Traffic Complaints	2	0	C	0-4	4	Expected
Total Calls for Service	383	-24	T	230-404	354	Expected
Traffic Collisions	4	0	C	1-7	4	Expected

Literally nothing has changed for the Gateway Plaza area. If any of Encore's customers have made their way over to the shopping center, it isn't being reflected in the statistics for crime and calls for service.

Activity in the east polygon (Broadway)

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Sexual Assault	1	0	C	0-1	2	High
Aggravated Assault	1	0	C	0-2	4	High
Simple Assault	3	0	C	0-6	3	Expected
Burglary	5	-1	T	0-5	0	Expected
Thefts from Vehicles	3	0	C	1-5	3	Expected
Other Theft	9	1	C	4-14	4	Expected
Auto Theft	4	0	C	3-5	2	Low
Vandalism	8	-1	T	2-10	4	Expected
Drug/Liquor Crimes	10	1	C	5-16	17	High
Violent Crime	8	0	C	5-11	11	Expected
Property Crime	34	-2	C	20-48	18	Low
Total Crime	52	-1	C	37-67	40	Expected
Suspicious Activity	24	-2	T	14-24	27	High
Traffic Complaints	31	3	T	22-53	39	Expected
Total Calls for Service	690	0	C	602-778	985	High
Traffic Collisions	21	0	C	12-30	16	Expected

The neighborhood across the street from the casino shows some effects from the extra people in the area. The sexual assaults were both at residences and involved offenders from Everett, so those are unlikely to be related. But the four aggravated assaults occurred on the streets around the casino. While none of them were initially flagged by the Everett Police as casino-related, we await some more information from the reports. In the latter half of 2019, Everett Police made a high number of arrests for drunk driving on Broadway, although the casino did not come up

in the offenders' accounts of where they had their last drinks. Residents reported more suspicious persons hanging around the neighborhood.

Total calls for service are high in the area, but these reflect police activity more than actual calls from the residents. Everett has allocated more directed patrols and traffic enforcement in the region than any year in its history, obviously doing their best to keep residents feeling safe amidst the new traffic.

Activity in the north polygon (neighborhood)

Road	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Thefts from Vehicles	4	0	C	1-7	2	Expected
Other Thefts	7	0	C	5-9	10	High
Shoplifting	6	0	C	1-12	10	Expected
Auto Theft	2	0	C	1-3	5	High
Vandalism	8	-1	C	3-13	6	Expected
Drug/Liquor Crimes	3	1	T	4-6	1	Low
Violent Crime	7	-1	C	4-10	7	Expected
Property Crime	36	-3	T	17-39	47	High
Total Crime	50	-3	T	31-50	56	High
Suspicious Activity	24	0	C	16-32	20	Expected
Traffic Complaints	22	-1	C	9-36	39	High
Total Calls for Service	514	-15	C	440-588	583	Expected
Traffic Collisions	7	0	C	4-10	12	High

The neighborhood north of the casino also saw some increases. A pattern of miscellaneous thefts is partly responsible for the general increase in property crime and total crime, but there were also five auto thefts towards the end of 2019, and most other crimes were at the high end of their usual range.

The northern neighborhood also saw slightly high values in traffic complaints (almost all parking-related), perhaps reflecting limited space at the casino garage. (The eastern neighborhood had high values for this during the first six months but dropped in the final two.) Finally, it beat its usual collision total by several incidents, a complete mix of causes, types, times, days, and streets.

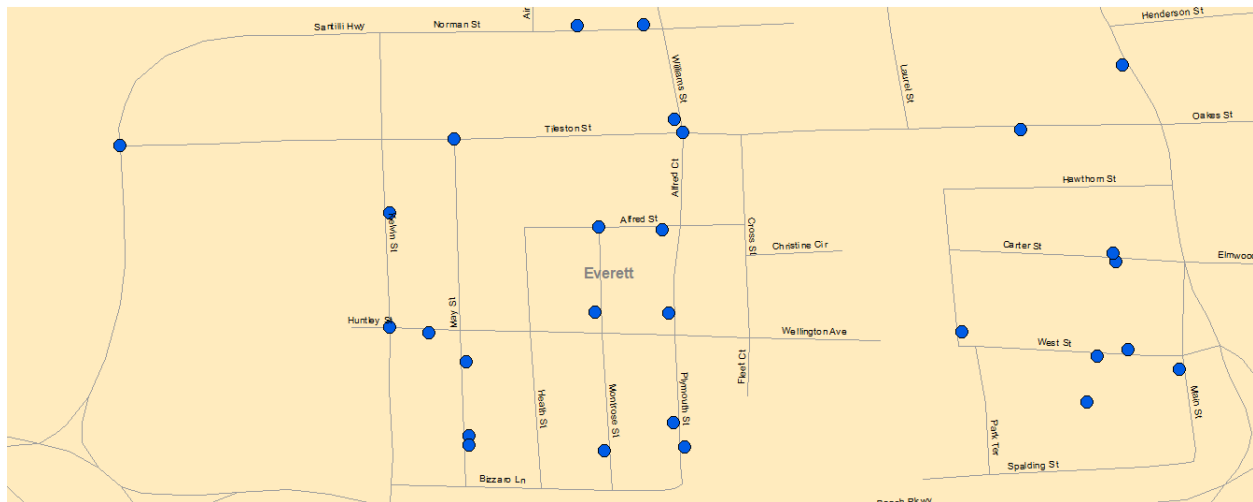


Figure 12: Parking complaints in the neighborhood north of Encore, July 2019-February 2020.

Multi-agency

Three other areas are worthy of attention for this report, all involving local and regional travel routes to Encore Boston Harbor or otherwise likely to be influenced by the facility:

1. **The Route 16 Corridor** between Route 93 and Route 1. Because we did not gain Medford's cooperation for this report, our analysis must be confined to Chelsea and Everett.
2. **The Route 1 Corridor** running from the northern border of Saugus through Malden and Revere before reaching Route 16 (Revere Beach Parkway). Saugus in particular has numerous businesses along this stretch of road, including the Square One Mall. Almost all traffic from Maine and coastal New Hampshire would pass through this area on the way to Encore.
3. **The Main Street Corridor** running from Melrose to Everett passing through Malden. Unfortunately, we did not have Malden's data for this report and had to confine the analysis to Melrose and Everett statistics.
4. **Assembly Square** in Somerville. The footbridge that was supposed to connect this "smart growth" area to Encore has not yet materialized, and its future is up in the air, but Assembly Square still has the densest concentration of shopping, restaurants, and hotels in the immediate area.

Incidents in the short distance of surface road between Route 93 and the Everett border in Charlestown are analyzed under that city's section.

Route 16 Corridor

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Sexual Assault	4	0	C	2-7	4	Expected
Robbery	10	-2	T	0-14	6	Expected
Aggravated Assault	15	0	C	11-19	19	Expected
Simple Assault	52	-1	C	43-61	50	Expected
Threats	29	-3	T	10-35	27	Expected
Burglary	20	-2	T	6-26	18	Expected
Shoplifting	32	-1	C	17-47	7	Low
Theft from Building	25	-5	T	8-22	7	Low
Theft from Vehicle	29	-5	T	8-30	12	Expected
Theft of MV Parts	3	0	C	2-4	2	Expected
Other Theft	34	-3	T	18-28	27	Expected
Auto Theft	17	-2	T	10-17	21	High
Forgery	5	-1	C	2-8	4	Expected
Fraud	11	0	C	6-16	10	Expected
Credit Card Fraud	9	0	C	7-11	5	Low
Identity Theft	8	-3	T	2-13	4	Expected
Stolen Property	5	-1	T	2-6	2	Expected
Vandalism	58	-5	T	30-46	45	Expected
Drugs	12	-1	T	7-14	6	Low
Weapons	5	1	T	4-9	4	Expected
Bad Checks	5	0	C	2-8	4	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Disorderly	7	-1	T	1-8	3	Expected
Drunk Driving	4	-1	T	1-5	6	High
Drunkness	9	-1	T	3-10	11	High
Family Offenses	8	2	T	7-16	14	Expected
Trespassing	5	0	C	2-8	5	Expected
Violent Total	110	-6	T	66-138	107	Expected
Property Total	259	-31	T	126-186	164	Expected
Total Crimes	428	-39	T	224-362	329	Expected
Abandoned Vehicle	42	1	C	26-58	32	Expected
Disabled Vehicle	43	2	C	31-55	45	Expected
General Service	127	-9	T	70-130	94	Expected
Medical	179	-4	C	153-205	175	Expected
Overdose	9	1	T	10-17	9	Low
Psychological	23	1	C	16-30	28	Expected
Recovered Vehicle	7	-1	T	2-8	6	Expected
Suspicious Activity	113	-1	C	97-129	79	Low
Traffic Complaints	102	7	C	69-135	138	High
Total Calls	3527	67	C	3138-3916	3596	Expected
Total Collisions	80	-1	C	74-86	70	Low

There are some items of note here, including higher-than-expected totals in **auto theft, drunk driving, drunkness, and traffic complaints**. Such increases were not generally seen in the overall statistics for the host agencies, or from other geographic areas analyzed. Some notes:

- Four of the auto thefts occurred at Pep Boys over a three month period between November 2019 and February 2020. None are explicitly listed by the EPD as Encore-related.
- The increase in drunkness incidents involves protective custodies in Chelsea, most on streets adjacent to Route 16. The individuals involved have all been middle-aged men from Chelsea (one from Revere), making an Encore connection unlikely.
- The drunk driving increase is analyzed in a later section.
- The increase in traffic complains is largely in Everett and almost all related to parking. They span all times of day and days of the week. Unlike reports coming from the immediate area of the casino, the distances involved here would be prohibitive to foot traffic to the casino. The cause of the increase is thus uncertain.

Route 1 Corridor

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Robbery	6	0	C	2-11	5	Expected
Aggravated Assault	11	0	C	6-17	14	Expected
Simple Assault	25	0	C	20-30	22	Expected
Threats	9	0	C	2-16	14	Expected
Burglary	12	-2	T	5-10	5	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Shoplifting	95	-12	T	33-106	65	Expected
Theft from Building	11	-2	T	3-14	2	Low
Theft from Vehicle	23	-5	T	10-13	8	Low
Other Theft	111	-13	T	31-111	47	Expected
Auto Theft	12	-2	T	4-12	6	Expected
Forgery	10	0	C	3-17	12	Expected
Fraud	20	-1	T	11-22	20	Expected
Credit Card Fraud	11	0	C	6-16	1	Low
Identity Theft	6	0	C	5-7	10	High
Vandalism	45	-5	T	24-37	28	Expected
Drugs	11	-1	C	6-16	9	Expected
Disorderly	5	-1	T	2-3	3	Expected
Drunk Driving	5	1	T	4-10	10	Expected
Drunkenness	5	0	C	1-9	2	Expected
Trespassing	4	0	C	2-6	1	Low
Violent Total	52	-1	C	30-78	59	Expected
Property Total	366	-42	T	149-281	213	Expected
Total Crimes	458	-45	T	207-372	300	Expected
Abandoned Vehicle	5	0	C	3-7	3	Expected
Disabled Vehicle	51	2	C	37-65	47	Expected
General Service	58	0	C	51-65	37	Low
Medical	61	6	T	73-96	73	Expected
Overdose	14	2	T	9-31	21	Expected
Psychological	23	1	C	15-31	19	Expected
Recovered Vehicle	7	0	C	3-11	8	Expected
Suspicious Activity	189	-3	C	171-207	146	Low
Traffic Complaints	34	1	C	26-42	22	Low
Total Calls	2275	9	C	2124-2426	2047	Low
Total Collisions	106	8	T	115-158	141	Expected

Saugus reported a lot of identity fraud at Route 1 businesses. Given the lack of similar reports in other areas, I would regard these as non-casino related unless more information is forthcoming. Nothing else increased in the area, and in fact total calls for service were low for the period.

Main Street Corridor

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Robbery	5	0	C	3-7	3	Expected
Aggravated Assault	7	0	C	2-12	9	Expected
Simple Assault	17	-2	T	9-18	20	High
Threats	9	-1	T	2-12	3	Expected
Burglary	11	-1	C	2-20	4	Expected
Shoplifting	4	0	C	1-7	1	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Theft from Building	10	-1	C	5-17	3	Low
Theft from Vehicle	12	-1	C	6-18	7	Expected
Other Theft	28	1	C	18-38	24	Expected
Auto Theft	6	0	C	3-9	6	Expected
Fraud	6	0	C	4-8	13	High
Credit Card Fraud	2	0	C	0-4	7	High
Vandalism	25	0	C	21-29	19	Low
Drugs	4	0	C	2-6	6	Expected
Disorderly	5	0	C	3-7	7	Expected
Violent Total	38	-3	T	16-51	35	Expected
Property Total	112	-4	C	90-134	90	Expected
Total Crimes	172	-7	C	135-209	158	Expected
Abandoned Vehicle	15	-1	C	8-22	11	Expected
Disabled Vehicle	3	0	C	2-4	3	Expected
General Service	42	-2	T	23-45	28	Expected
Medical	75	-2	C	63-87	59	Low
Overdose	3	1	C	2-6	5	Expected
Recovered Vehicle	0	0	C	0-1	1	Expected
Suspicious Activity	26	1	C	16-36	20	Expected
Traffic Complaints	70	2	C	40-100	76	Expected
Total Calls	835	8	C	693-977	822	Expected
Total Collisions	90	3	C	74-106	93	Expected

Five of the simple assault incidents, enough to account for all the increase, occurred at Melrose Wakefield Hospital. They seem to be a combination of domestic assaults and assaults on staff, and they could be Encore-related if it can be shown that hospital traffic increased because of the casino. Surprisingly, three of the fraud and credit card fraud incidents are also located at the medical facility; others occurred up and down Main Street in both Everett and Melrose.

Assembly Square⁴

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019-Feb 2020	Result
Sexual Assault	1	0	T	1-3	1	Expected
Kidnapping	0	0	T	0-1	1	Expected
Robbery	1	1	T	2-5	1	Low
Aggravated Assault	2	1	C	0-6	4	Expected
Simple Assault	6	1	T	5-14	9	Expected
Threats	1	0	T	1-4	2	Expected
Arson	0	0	C	0-0	0	Expected
Burglary	3	0	C	1-6	4	Expected

⁴ Since the new Assembly Square did not open until 2014, pre-Encore average, slope, and trend are based on data from 2015-2019 rather than 2013-2019. Somerville was not able to provide location-specific collision data for past years, so collisions are based on calls for service rather than collision reports.

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	Jul 2019- Feb 2020	Result
Theft from Building	6	2	T	4-21	7	Expected
Theft from Vehicle	7	1	C	2-13	4	Expected
Other Theft	58	6	C	13-108	48	Expected
Auto Theft	4	1	C	1-8	6	Expected
Forgery	3	1	C	0-7	7	Expected
Fraud	8	2	T	6-19	16	Expected
Credit Card Fraud	1	0	C	0-3	7	High
Identity Theft	42	7	T	21-103	23	Expected
Employee Theft	0	0	C	0-0	0	Expected
Vandalism	9	2	T	8-26	10	Expected
Drugs	6	1	C	3-9	7	Expected
Pornography	0	0	C	0-0	0	Expected
Prostitution	1	0	C	0-2	0	Expected
Weapons	3	1	C	0-5	5	Expected
Disorderly	3	1	T	2-8	4	Expected
Drunk Driving	1	0	T	0-3	0	Expected
Family Offenses	1	0	C	0-2	0	Expected
Liquor Laws	0	0	C	0-1	1	Expected
Trespassing	1	0	C	0-2	0	Expected
Violent Total	11	3	T	9-33	18	Expected
Property Total	142	23	T	80-331	132	Expected
Total Crimes	169	28	T	122-371	167	Expected
Disabled Vehicle	9	1	C	4-15	9	Expected
General Service	73	4	T	68-111	62	Low
Medical	242	-23	C	110-374	172	Expected
Overdose	4	0	C	2-7	3	Expected
Psychological	6	1	C	2-10	16	High
Recovered Vehicle	2	0	C	1-4	1	Expected
Suspicious Activity	64	3	C	42-86	80	Expected
Traffic Complaints	115	10	T	96-154	149	Expected
Total Calls	3906	166	T	3837-5304	3651	Low
Total Collisions	106	-2	C	85-127	119	Expected

Assembly Square has not yet shown many signs of increased activity, which makes sense given limited access from Encore. Four of the increased credit card fraud incidents occurred at Kay Jewelers between September and January, and a couple involved out-of-state defendants. There was also an increase in calls for service coded "PSYCH EMERGENCY" scattered throughout the area with no particular commonalities.

Overall, the evidence suggests that Encore has shown no or minimal effect on crimes and calls for service in areas near and on the way to and from the casino, the exceptions being the miscellany of potentially-related items in the eastern and northern neighborhoods.

Analysis of COVID-related closing and reopening

The data for this report was mostly collected in January 2021. The report had been intended to cover through July 2020—a one-year period after Encore opened in 2019. However, a number of landmark things occurred towards the end of this analysis period and immediately afterwards.

- **31 December 2019:** The World Health Organization confirms a mysterious outbreak of a pneumonia-like disease in Wuhan, China.
- **11 January 2020:** China reports the first death from the new coronavirus.
- **22 January 2020:** The first COVID-19 case in the United States is confirmed by the Centers for Disease Control and prevention.
- **30 January 2020:** The World Health Organization declares a global health emergency.
- **1 February 2020:** The first Massachusetts COVID case is confirmed.
- **11 February 2020:** The new virus is given the designation COVID-19 by the WHO.
- **26 February 2020:** The first case of local transmission is confirmed in the United States.
- **29 February 2020:** The first confirmed U.S. death from COVID-19, a man in Washington State.
- **10 March 2020:** Massachusetts Governor Charlie Baker declares a state of emergency.
- **12 March 2020:** A man who visited Encore Boston Harbor on 5 March is diagnosed with COVID-19.
- **13 March 2020:** President Trump declares a national emergency.
- **14 March 2020:** The Massachusetts Gaming Commission votes unanimously to suspend operation at all three casinos.
- **15 March 2020:** The CDC warns against large gatherings of people. Governor Charlie Baker issues an order prohibiting gatherings of more than 25 people and closes K–12 schools. Amendments would keep schools closed for the rest of the season.
- **17 March 2020:** With West Virginia’s first COVID-19 case, the virus is present in all 50 states.
- **18 March 2020:** Governor Baker orders the closure of non-emergency childcare.
- **23 March 2020:** Governor Baker’s 15 March order is amended to prohibit gatherings of more than 10 people.
- **1 May 2020:** Governor Baker issues an order requiring face coverings in public places.
- **8-12 July 2020:** Massachusetts casinos re-open with restrictions on occupancy and types of activities.

Ultimately, Massachusetts casinos were completely closed from the period of 14 March to 8 July 2020 and have been operating at 25% capacity since re-opening, naturally eliminating or vastly mitigating their effects on the surrounding communities. But these closures occurred during a period in which many bars, restaurants, schools, and other facilities were closed, too, or operated under severe restrictions. Countless workers began working remotely, and many residents changed their attitudes about the desirability of certain activities, even if they were technically legal.

The impact on crime and public safety was immediate and detectable. The tables below show significant decreases in most crimes. Media reports during this period have correctly identified decreases in crimes like robbery, burglary, thefts from persons, and thefts from vehicles. (The Encore region bucked this latter trend, showing an increase in thefts from vehicles. Charleston bore the brunt of this increase, doubling its usual total.) The media has also widely

suggested that domestic violence increased during this period—a result of too many family members on top of each other for too long—but if that’s the case elsewhere, it isn’t reflected in the first three months of Encore-area data.



Figure 13: Thefts from vehicles reported in Charlestown during the COVID shutdown, March-June 2020. The neighborhood had twice its normal total.

The reason for such heavy decreases in most crimes was worked out in the 1970s by criminologists Marcus Felson and Larry Cohen. They argued that crime is largely a byproduct of the routine activities of society. In their daily lives, people going about their business unwittingly create opportunities for crimes to occur. They leave their houses unoccupied during large portions of the day. They leave their cars unattended for hours in large parking lots. They get tipsy in bars and casinos and then go walking through dark alleys. Criminals simply find the right target in the right time and place. A pandemic suppresses such activities. People stay at home, where they and their family members are able to guard their houses, cars, and persons. Criminals stay at home, too. Most daily interactions that would give rise to crime are vastly diminished.

Incidents reported to region, 1 March to 30 June

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	2020	Result
Murder	3	0	C	1–6	2	Expected
Sexual Assault	94	-1	C	78–110	64	Low
Kidnapping	15	0	C	10–20	3	Low
Robbery	154	-17	T	74–134	65	Low
Aggravated Assault	399	-26	T	260–361	309	Expected
Simple Assault	861	-45	T	568–790	586	Expected
Threats	318	-15	T	214–309	190	Low
Arson	8	-1	T	3–9	3	Expected
Burglary	371	-61	T	190–283	196	Expected
Theft from Persons	26	-3	T	11–29	12	Expected
Purse-Snatching	10	-2	T	2–8	3	Expected

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	2020	Result
Shoplifting	264	-16	T	160-292	86	Low
Theft from Building	162	-11	T	100-140	108	Expected
Theft from Vehicle	346	-52	T	149-227	301	High
Theft of MV Parts	37	-3	C	15-60	12	Low
Other Theft	820	-81	T	473-644	558	Expected
Auto Theft	232	-16	T	140-226	170	Expected
Forgery	68	-2	C	51-85	31	Low
Fraud	196	-2	C	175-217	168	Low
Credit Card Fraud	115	4	C	78-152	100	Expected
Identity Theft	123	-1	C	82-164	105	Expected
Employee Theft	6	-1	C	2-10	2	Expected
Stolen Property	33	-4	T	18-28	28	Expected
Vandalism	908	-100	T	462-671	581	Expected
Drugs	253	-27	T	132-177	81	Low
Drug Equipment	8	-1	C	4-12	7	Expected
Statutory Rape	13	2	T	14-27	13	Low
Gambling	1	0	C	0-2	1	Expected
Pornography	8	0	C	4-12	15	High
Prostitution	36	-11	T	7-16	0	Low
Weapons	87	-4	C	64-110	73	Expected
Bad Checks	19	-3	T	7-16	7	Expected
Disorderly	166	-14	T	98-159	86	Low
Drunk Driving	113	8	T	116-172	73	Low
Drunkenness	112	-12	T	47-96	30	Low
Family Offenses	124	5	T	109-181	102	Low
Liquor Laws	45	-1	C	37-53	22	Low
Runaway	4	-1	C	0-9	0	Expected
Trespassing	101	-4	T	61-110	49	Low
Violent Total	1844	-104	T	1205-1730	1219	Expected
Property Total	3725	-351	T	2130-2782	2464	Expected
Total	6659	-516	T	3991-5365	4242	Expected

The effect of the closures on collision reports is also quite significant. People do not crash when they aren't driving.

Collisions reported to the region, 1 March to 30 June⁵

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Vehicle in traffic	1219	-6	C	1048-1390	647	Low
Parked vehicle	172	-4	C	150-194	145	Low
Pedestrian	83	-3	C	65-101	56	Low
Bicyclist	13	-1	T	5-15	6	Expected

⁵ Does not include Malden or Boston. Somerville is included in the total but not the individual categories.

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Animal	2	0	C	0-4	1	Expected
Fixed object	67	3	C	51-83	55	Expected
Curb/barrier	28	-1	C	20-36	22	Expected
Rollover/Jackknife	4	1	C	1-8	3	Expected
Other/Unknown	65	-7	T	34-61	23	Low
Total	1837	-24	C	1617-2057	1045	Low

Re-opening

Encore Boston Harbor was allowed to re-open on 12 July 2020 after implementing a number of safety measures, including social distancing, face masks, temperature screenings, and a maximum capacity of 25%. Other businesses followed suit, but large events remained forbidden throughout the Commonwealth, and others operated with the same capacity restrictions as the casino. Schools and state offices remained closed for the rest of the year, and many private industry workers continued to work from home.

Incidents reported to region, July–December

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	2020	Result
Murder	6	0	C	2-10	6	Expected
Sexual Assault	140	-1	C	120-160	116	Low
Kidnapping	20	-1	C	14-26	12	Low
Robbery	250	-28	T	135-160	115	Low
Aggravated Assault	605	-15	T	493-598	528	Expected
Simple Assault	1278	-55	T	873-1262	992	Expected
Threats	437	-20	T	290-467	308	Expected
Arson	12	-3	T	2-14	3	Expected
Burglary	580	-80	T	290-372	327	Expected
Theft from Persons	45	-2	T	30-48	28	Low
Purse-Snatching	16	-2	T	8-18	8	Expected
Shoplifting	379	-24	T	214-434	195	Low
Theft from Building	276	-15	T	193-269	184	Low
Theft from Machine	0	0	C	0-1	0	Expected
Theft from Vehicle	623	-63	T	345-494	509	High
Theft of MV Parts	42	-3	C	18-66	24	Expected
Other Theft	1302	-122	T	760-1093	1139	High
Auto Theft	406	-31	T	231-397	353	Expected
Forgery	87	-6	T	53-94	47	Low
Fraud	304	1	C	260-348	447	High
Credit Card Fraud	135	-3	C	105-165	323	High
Identity Theft	151	2	C	118-184	531	High
Employee Theft	9	-1	T	5-9	1	Low
Stolen Property	50	-4	T	26-59	49	Expected
Vandalism	1385	-137	T	793-1049	1067	High
Drugs	333	-24	T	209-300	162	Low

Category	Pre-Enc Avg	Slope	Window Type	Pred. Window	2020	Result
Drug Equipment	11	0	C	8–14	2	Low
Statutory Rape	18	3	T	12–51	20	Expected
Gambling	2	0	C	0–5	2	Expected
Pornography	12	2	T	8–23	23	Expected
Prostitution	24	-8	T	4–8	1	Low
Weapons	137	-1	C	118–156	101	Low
Bad Checks	29	-4	C	12–46	5	Low
Disorderly	240	-18	T	136–233	123	Low
Drunk Driving	171	7	T	156–240	137	Low
Drunkenness	162	-13	T	97–141	42	Low
Family Offenses	186	3	C	152–220	189	Expected
Liquor Laws	76	2	C	67–85	60	Low
Runaway	4	-1	T	0–6	0	Expected
Trespassing	144	-9	T	87–160	99	Expected
Violent Total	2736	-118	T	1927–2683	2077	Expected
Property Total	5803	-494	T	3565–4651	5235	High
Total	10089	-672	T	6488–8733	8278	Expected

Some interesting patterns have emerged during this period:

- Boston’s **thefts from vehicles** dropped off, replaced by new highs in Everett and Revere. These thefts are not related spatially to the casino; they’re mostly clustered in the two cities’ downtown areas. In fact, the crimes seem to be conspicuously avoiding the area of the casino.
- Lynn skyrocketed in **miscellaneous thefts**, mostly at residences during the day. These may be package thefts.
- **Fraud** (confidence games) reached record highs in Everett, Boston, and Lynn.
- Somerville suddenly reported **240 credit card frauds**, most committed in “Cyberspace.” The agency had never taken more than 27 during the same 6-month period in previous years. This almost certainly signals a shift in reporting practices. Credit card fraud was also high in Lynn, though not nearly as dramatic.
- Lynn did something similar with **identity theft and impersonation**, suddenly reporting 237 incidents during a period in which they had never reported more than 22 before. These two crimes together drove up total property crime for the region.
- **Vandalism** was high in Chelsea and Everett, but with no patterns. There’s a smattering on Broadway near the casino, but most of them are concentrated in parts of the cities away from Encore.
- Everett reported only one incident that was casino-related and did not happen at the casino: a drug offense in a parking lot at Mystic and Bow Streets in September 2020 that resulted in the arrest of a 33-year-old man from Whitman.
- Any crime that involves large numbers of people or personal interactions remained very low, including almost all crimes related to disorder, drugs, and liquor.
- There was still no sign of a domestic violence increase as reported by media outlets elsewhere.

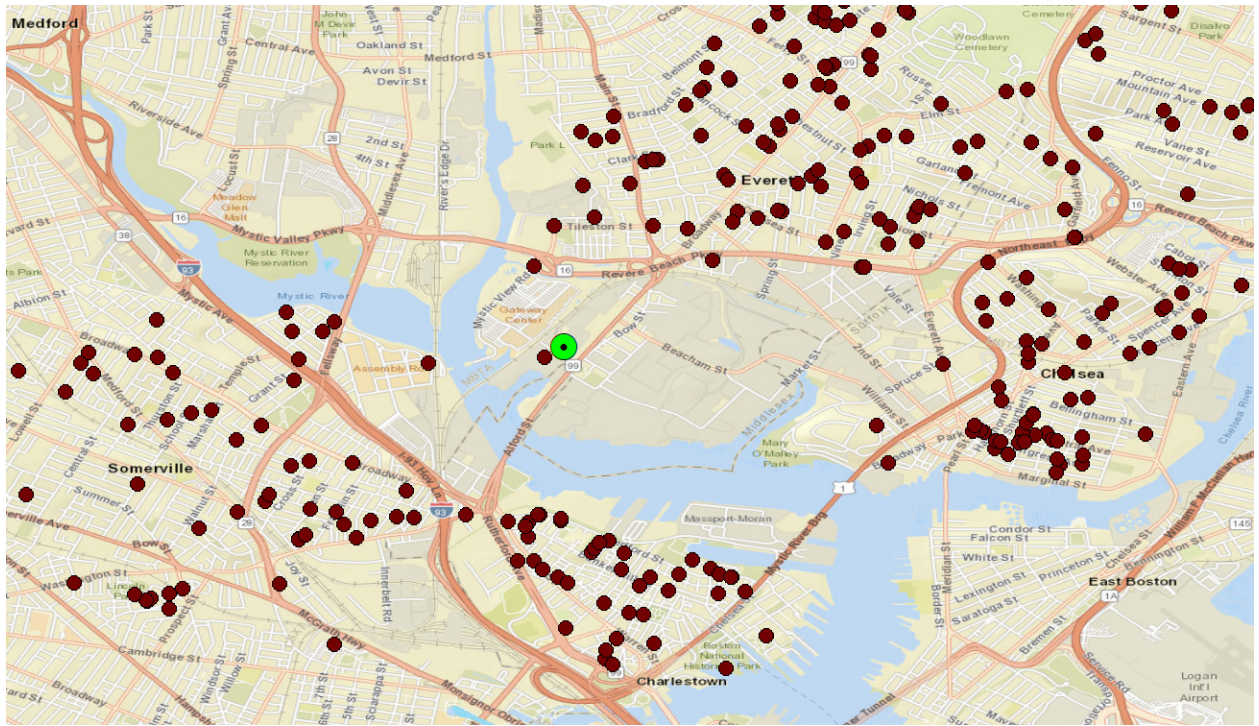


Figure 14: Thefts from vehicles increased in the last 6 months of 2020, but not at all in the immediate radius of Encore Boston Harbor.

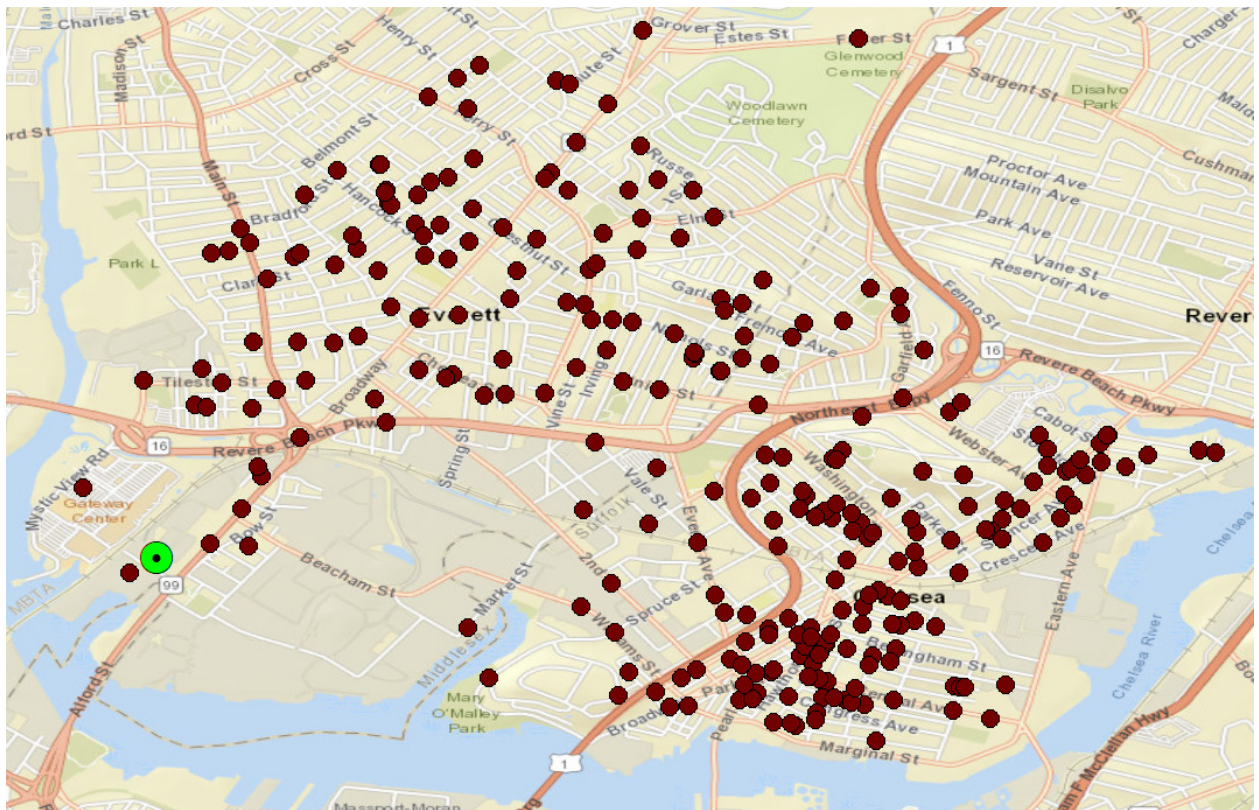


Figure 15: Vandalism incidents in Chelsea and Everett in the second half of 2020.

Collisions, meanwhile, recovered slightly but were still well below their normal total for the region:

Collisions reported to the region, July to December⁶

Category	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Vehicle in traffic	1919	-20	C	1674-2164	1318	Low
Parked vehicle	255	-6	T	211-253	237	Expected
Pedestrian	147	1	C	132-162	118	Low
Bicyclist	22	-2	T	11-22	17	Expected
Animal	3	0	C	1-5	6	High
Fixed object	106	3	C	87-125	103	Expected
Curb/barrier	46	1	C	34-58	43	Expected
Rollover/Jackknife	5	0	C	2-8	8	Expected
Other/Unknown	99	-12	T	38-89	57	Expected
Total	2892	-33	C	2594-3190	2121	Low

The implications of these figures are stark. First, even during a period of limited reopening, any trends influenced by Encore are likely to be undetectable amidst the more significant changes caused by societal reaction to COVID unless I adopt new methods of detection. Second, 2020 (and probably 2021) will be useless as baseline years in any future analysis of crime statistics.

⁶ Does not include Malden or Boston. Somerville is included in the total but not the individual categories.

Preliminary drunk driving analysis

Like any responsible facility that serves alcohol, Encore has a number of policies and practices in place to prevent patrons from becoming intoxicated and particularly from driving away while intoxicated. However, the size of the facility, the number of entrances and exits, and the difficulty in fully monitoring any individual’s drinking activity makes it inevitable that some intoxicated patrons—and thus intoxicated drivers—will slip through the cracks. This report makes no attempt to render judgement on what number is reasonable; it only attempts to collect the available evidence. This preliminary analysis is offered in anticipation of a longer report later this year that will cover all three casinos.

There are several available indicators that we can study to determine whether Encore has led to an increase in drunk driving in the region, some better than others. Each available dataset is reviewed below. For simplicity’s sake, I have looked at full calendar years for the statistics below.

Drunk driving arrests by jurisdiction

The statistics below showed that only Everett significantly rose above its pre-Encore average in drunk driving arrests, although the total for the region was at the upper end of its predicted boundary. These figures suggest that Everett is investing more police resources in drunk driving enforcement, but not necessarily that drunk driving itself is increasing.

Arrests and summonses for drunk driving, July–February

City/Town	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Everett	18	1	C	11–25	50	High
Boston/Charlestown	3	0	C	1–5	4	Expected
Chelsea	31	0	C	17–45	31	Expected
Lynn	73	1	C	57–89	89	Expected
Malden ⁷	9	-2	T	3–7	3	Expected
Melrose	5	-1	C	2–8	4	Expected
Revere	43	4	C	23–63	36	Expected
Saugus	18	2	T	15–37	23	Expected
Somerville	24	1	C	17–31	18	Expected
Total	226	5	C	194–258	258	Expected

Note that the numbers plummet during the period of closures for COVID:

Arrests and summonses for drunk driving, March–June

City/Town	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Everett	12	1	C	7–17	6	Low
Boston/Charlestown	1	0	C	0–2	0	Expected
Chelsea	18	1	C	11–25	20	Expected
Lynn	34	1	C	25–43	24	Low
Melrose	4	0	C	1–7	0	Low

⁷ Malden figures are only through December.

City/Town	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Revere	20	3	T	21–35	12	Low
Saugus	13	2	T	14–25	7	Low
Somerville	10	0	C	6–14	4	Low
Total	113	8	T	116–172	73	Low

Crashes that involve an arrest or summons for drunk driving

A better set of statistics involves merging the original call-for-service with the offense dataset to find offenses of drunk driving that originated as calls-for-service for traffic collisions. This should capture most of the relevant incidents, missing only cases where the determination of drunk driving happened well after the original call, or when the original call for some reason was not coded as a collision. Since we do not have call-for-service data for Boston, we cannot include the city in the analysis.

Calls for service for traffic collisions with a later offense for drunk driving, July–February

City/Town	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Everett	3	0	C	1–5	17	High
Chelsea	17	0	C	11–23	16	Expected
Lynn	39	2	C	26–52	40	Expected
Malden ⁸	5	-1	T	1–8	3	Expected
Melrose	3	0	C	1–5	2	Expected
Revere	19	1	C	11–27	18	Expected
Saugus	7	1	C	3–11	8	Expected
Somerville	13	-1	C	9–17	12	Expected
Total	106	2	C	92–120	116	Expected

The results mirror the drunk driving arrest statistics above. Even when we consider only drunk driving arrests that occurred *after crashes*, thus eliminating the bias of extra police enforcement, we still find Everett significantly above its normal volume while the other communities are all within expected range.

As with total arrests, the numbers take a dive during the four months that Encore was closed for business, but then again so was almost every bar and restaurant in the area.

Calls for service for traffic collisions with a later offense for drunk driving, March–June

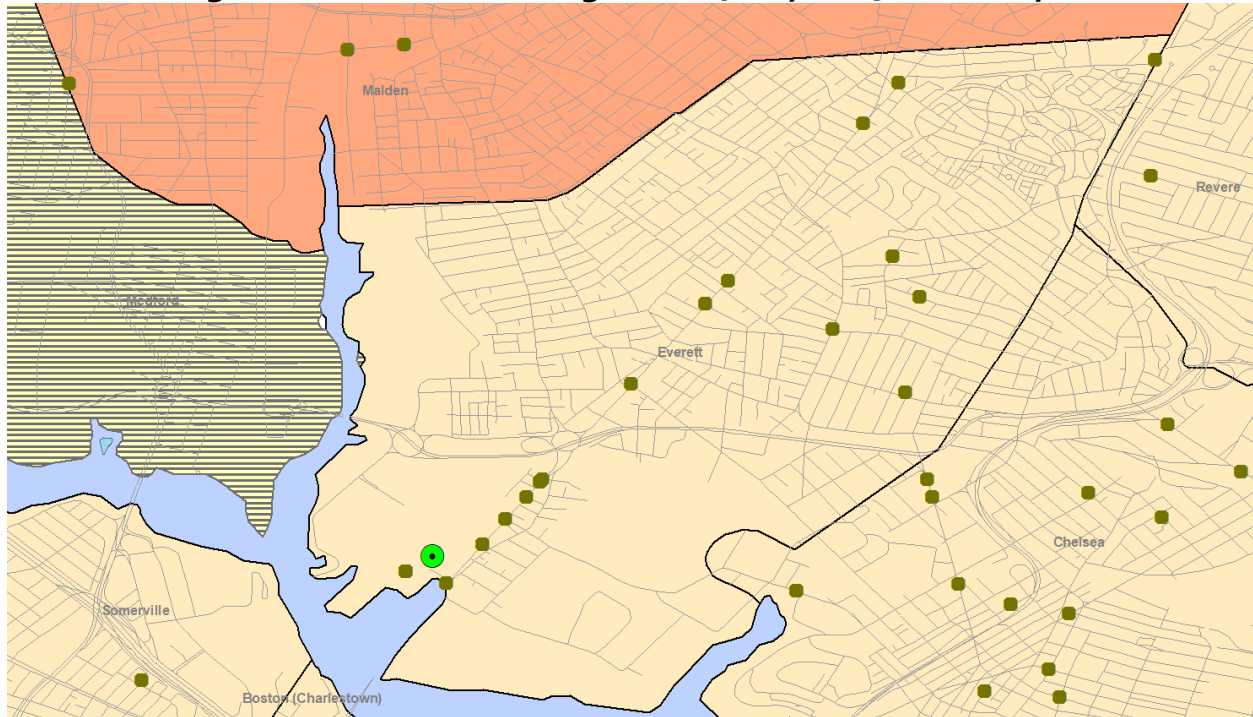
City/Town	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Everett	4	0	C	2–6	1	Low
Chelsea	9	1	C	5–13	8	Expected
Lynn	19	1	C	14–24	13	Low
Melrose	2	0	C	0–4	0	Expected
Revere	10	1	T	8–18	0	Low
Saugus	5	0	C	2–8	0	Low
Somerville	5	0	C	2–9	2	Expected

⁸ Malden figures are only through December.

City/Town	Pre-MGM Avg	Slope	Window Type	Pred. Window	2020	Result
Total	53	3	T	54-78	24	Low

During the period that drunk driving arrests caused by crashes were high in Everett, 11 of the 17 incidents occurred on Broadway, 6 of them in the block of Encore Boston Harbor. However, the Everett Police marked none of these as “casino-related” and indicated in discussions that the “last drink” locations reported by the drivers had occurred elsewhere.

Drunk driving arrests made following a crash, July 2019–February 2020



“Last Drink” Locations from adjudication

According to data received from the Massachusetts Alcoholic Beverages Control Commission, Encore Boston Harbor was named as the location of the “last drink” for 7 drunk drivers whose cases were adjudicated in 2019 and 2020, a number that will likely rise as more cases that resulted in arrest during this period wrap up in court. MGM Springfield was named in 18 adjudications during the same period, and Plainridge Park in 5.

“Last Drink” locations as reported to police

This dataset is currently undergoing collection within all three casino areas, and it will be released in a special report later this year. However, a preliminary report from the Everett Police says that although arrests and collisions increased on Broadway, the “last drink” statements of those arrested have indicated that they’re coming from somewhere other than Encore.

Conclusion

There's a lot of "smoke" (circumstantial evidence) suggesting at least a mild increase in drunk driving caused by the casino, but so far not much of a "fire" (direct evidence). Expanded data collection for the special report should help us make a final determination.

Conclusions and future analytical plans

The increases in crimes and the existence of patterns that can be tied specifically or even circumstantially to Encore Boston Harbor are small and rare. The casino has reported a certain amount of crime within its own walls, creating new challenges for the responding law enforcement agencies, but except for a few phenomena discussed within this report, the influence of Encore does seem to be contained within those walls.

This report mostly covers a period that ended before society was completely overturned by the COVID-19 pandemic. During the following near-year, Encore was occasionally closed and occasionally open, but never operating at full capacity, and never again with a populace as interested in traveling and intermingling with others. This situation has also affected bars, restaurants, hotels, stores, schools, and entertainment venues.

Most crime is a consequence of the routine activities of everyday life—moments of opportunity seized by offenders when they encounter suitable targets at the right place and time. COVID-19 has brought essentially unmeasurable changes to these routine activities. As a crime analyst, I have seen nothing like it except in occasional cases of natural disasters.

As if COVID-19 was not enough, 31 May 2020 marked the beginning of another major social movement, when George Floyd was tragically killed by the Minneapolis Police. This act sparked a wave of mass protests that included the Boston region. The effects of these protests and their larger movement on police practice will somehow have to be assessed in the middle of an already-unsettled time.

Until life returns to normal, and perhaps not even for a while after that, the continuing effects of Encore on public safety issues in the surrounding communities will be very difficult to untangle from changes wrought by the general COVID upheaval. That does not mean they will be impossible to discern, but the task may require significantly different and innovative analytical methods, and I am not prepared at this time to say exactly what those will be.

While I work with other researchers and analysts to generate ideas for continuing analysis, there are several reports waiting to be written based largely on pre-COVID data. These include:

- An analysis of changes in the Encore area compared to control areas and the rest of the state. Statewide data for 2019 and 2020 will be available soon.
- A comparative analysis of traffic collisions in the Encore 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 in the process of collecting data from comparison casinos nationwide.
- A more thorough analysis of drunk driving and alcohol-related crashes, which will be released as a separate report that covers all three casinos.
- A summary report with the aggregated findings from Plainridge Park, MGM Springfield, and Encore Boston Harbor.

Watch for these additional reports in 2020 and 2021.

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.
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 broader mandate for its study than just crime.
UCR	Uniform Crime Reporting (program)	National program for the reporting of crime statistics to the FBI. Captures only summary data about a limited number of crime types. Contrast with NIBRS.

Crime definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Pornography: Possession, sale, or manufacturing of illegal pornography. 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 so it makes more sense to analyze them using the crime categories above than in their original call-for-service form. Thus, the only incident types we have selected for analysis in this report are noncriminal. Definitions of those types appear below. Because the police officer does not usually write a full report for calls for service, the dataset available for analysis is more limited.

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

for service.” Practices differ significantly between police agencies as to what is reported under this category, and it is generally not useful for analysis.

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

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

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

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

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

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

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

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

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

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

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

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

Missing person: a runaway or other missing person.

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

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

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

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

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

Trespassing: Trespassing on private or public property.

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

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

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

Offense types by associated crime category

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

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