

MGC Research Snapshot

Assessing the Influence of Gambling on Public Safety in Massachusetts Cities and Towns During the COVID-19 Pandemic: Analysis of the Influence of Encore Boston Harbor on its Surrounding Community

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What you need to know

This report is an analysis of changes in activity in the communities surrounding Encore Boston Harbor (EBH) over five distinct timeframes before, during, and since COVID-19-related closure. Findings include that, overall, the area around EBH did not experience significant increases in crime when compared to other areas in the region.

What is this research about?

Encore Boston Harbor (EBH) opened on 23 June 2019, drawing more than 3.5 million visitors during the first eight months of operation. This analysis encompassing the period pre-, during, and post-COVID-19 closure provides a temporal and spatial view and perspective of crime in and around EBH.

Important to note is that any study analyzing crime and disorder during this period is challenged by the effects of events such as the social stress of COVID-19, protests related to George Floyd, and political unrest surrounding the 2020 election. It is virtually impossible to control for these contributing factors; and as such, this report offers benchmarks for future research and a starting point for understanding the scope and nature of crime in the region.

What did the researchers do?

Six cities (Chelsea, Everett, Malden, Melrose, Saugus, and Lynn), as well as the Massachusetts State Police, submitted data for analysis. 33 FBI crime offenses were grouped into six categories and tracked for patterns over the study period. Researchers used spatial analysis software to understand crime and place, particularly crime hotspots and micro-level analysis. They then conducted a spatial analysis of crime counts across the study area using hexagon polygons of equal size (approximately one-quarter-mile square areas) to compare high and low crime areas and describe the scope and nature of crime in them compared to the hexagon encompassing the casino and those hexagons immediately contiguous to it.

EBH was compared to three other crime hotspots identified in the region. Historical averages and spatial and temporal patterns for key crime categories were established for each agency and the region to be used as benchmarks for future analysis.

Tableau data visualization software was utilized to conduct analysis over five distinct periods: (1) Pre-casino opening (9/30/18-6/22/19), (2) Open (6/23/19-3/14/20), (3) Closed due to COVID-19 (3/15/20-7/11/20), (4) Restricted Reopening (7/12/20-5/29/21), and (5) Reopen (5/30/21-7/2/22). Weekly averages were calculated and graphed to illustrate the fluctuation of activity over the entire period and within each study period. Comparisons were made to ascertain the degree to which casino operations and general COVID-19 closures impacted crime and call levels. Any significant increases were analyzed in more detail with available quantitative data.

This report does not generally attempt to ascertain causality; it identifies the trends across focused periods of pre-opening, open, closed, restricted and reopened cycles and discusses contributing factors and geographic explanations for high and low activity. Future analysis will attempt to ascertain the causal factors and correlates related to crime in proximity to the casino.

What did the researchers find?

The most significant finding was that crime started to rebound or increase before EBH reopened. This timing



suggests that the casino is not causing crime to go up, but other socioeconomic and/or psychological factors are playing a role. Since crime rose while the casino was still closed, it illustrates that factors other than the casino are at play in causing crime.

Additional findings:

- The literature review offers evidence that some crimes were more greatly impacted by COVID-19 than others. Theft from persons, shoplifting, robberies, and burglaries declined during the closures. Auto thefts and domestic violence exhibited increases over the same period. Vice and cybercrime increased over periods of closure.
- Vehicle crime skyrocketed when the casino initially opened and remained generally high since the closure and during restrictive reopening. Although Auto Crimes dipped at the early stage of reopening, it skyrocketed once again to a record high in 1/22 and remained extremely high from 10/21-6/22.
- Crime and calls for service reduced in frequency when establishments in the region were closed due to COVID-19, peaked before the closure ended, and returned to original casino opening levels.
- During the closures, crime dropped in all area communities, but rebounded substantially before closures were lifted.
- During the reopening period, some crimes rebounded, but most remained low.
- Overall, crime in the region has been steadily declining over the past 10 years until 2022, where an uptick occurred.
- The City of Lynn has been trending up over the past three years. Malden and Melrose each have experienced an upward trend while Everett, Chelsea, and Saugus have remained flat in the most recent years.
- The entire region shares crime-specific problems similar in nature. The top ten crimes within the region are consistent across jurisdiction. Vandalism, Simple Assault, Other Theft, Theft from Vehicle, Burglary, and Aggravated Assault were within the top-ten crime types in each city under study.
- Three distinct hotspots in the region were identified and compared to the Encore hexagon cluster.
- The immediate areas around the casino showed few increases in crime.
- Violent crime clearly clusters more heavily in Lynn and to a lesser degree in Chelsea.
- Burglaries were more evenly distributed over the entire region.
- Overall violent, property, and total crime followed a consistent pattern.

Conclusion and Future Directions

Overall, the area around EBH did not experience significant increases in crime when compared to other areas in the region. Developing mitigation strategies and collaborative initiatives appears to be feasible, given the shared similarities in crime types and temporal patterns.

About the researchers

This report was prepared by Justice Research Associates, LLC, crime analysis consultant to the Massachusetts Gaming Commission. For more information about this report, please contact Noah Fritz at njfritz@gmail.com.

Future studies will use Risk Terrain Modeling to better understand contributing factors to crime hotspots and compare them to the EBH cluster, as well as critical analysis of certain types of crime associated with the casino. Additional micro-analysis is needed to fully ascertain crime and place, and the Risk Terrain Model will be employed in future reports to study risk and to assist agencies in developing crime prevention and Problem-Oriented Policing (POP) projects to improve their effectiveness of practice.

Future research will also include an analysis of trends using full reports, including narratives, an analysis of changes in the EBH area compared to control areas and the rest of the state, a comparative analysis of traffic collisions in the Everett area versus control areas, and a comparison of EBH with other casinos, normalized by the number of annual visitors to each facility.

Citation

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<https://massgaming.com/about/research-agenda-search/?cat=public-safety>

Key Words

Public Safety; Everett

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About this Snapshot

MGC Snapshots are intended to translate lengthy and sometimes technical reports into an easily understandable overview of the research. The findings and recommendations in the Snapshot are those of the researchers and do not necessarily reflect the position of the MGC.

