



UNIVERSITY OF MASSACHUSETTS SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES

SEIGMA Commercial Real Estate Report

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Executive Summary

The SEIGMA team used proprietary data from The CoStar Group to evaluate how commercial real estate conditions have changed in host and surrounding communities since the expansion of gambling in Massachusetts. Overall, our findings indicate that the expansion of gambling in Massachusetts has not had a dramatic effect on the local commercial real estate markets. While commercial real estate conditions in the host and surrounding communities have shifted over time, many of these shifts are in line with changes observed regionally or statewide. Our study period corresponds with a period of strong economic growth in the Commonwealth in general, and in the Greater Boston region in particular, so while there are many indicators of growth in the commercial real estate market, it is difficult to attribute many of those to the casinos. In some cases, particularly in smaller communities, the relatively small number of properties in CoStar's database can lead to highly volatile data, where changes in the status of even a single building can lead to substantial shifts in community-wide averages. This can make it difficult to discern any clear trend, whether related to the casino or otherwise.

While it is probable, and even likely, that the development of the casinos affected local real estate conditions in the host communities, the conditions described above make it challenging to assess the magnitude of their impact with any statistical certainty. While this report assesses how real estate conditions have changed over time, we make no attempt to statistically isolate the precise impact of the casinos, or to speculate on what real estate conditions in the host or surrounding communities might look like without the casinos. Perhaps the most important finding of this study is that the presence of the casinos has not dramatically transformed local commercial real estate markets, either for better or for worse---positions that were argued by casino proponents and critics, respectively. That said, a few key findings do stand out, where market conditions have shifted in notable ways that could be related to the casinos. Those include the following:

- Within the context of a low commercial vacancy rate and a relatively slowly-growing commercial real estate inventory, inflation-adjusted sales price per-square foot for commercial buildings in Everett have steadily risen over the last decade. All the commercial inventory growth observed in Everett happened leading up to or shortly after the opening of the casino.
- Sales prices in Springfield were more stable than in Everett, but the number of commercial real estate sales per year increased substantially over the last decade, in the context of a property market where growth in commercial real estate inventory has outpaced both the Commonwealth and Springfield's surrounding communities as a whole.
- As a smaller community, trends in Plainville are harder to discern. While real estate conditions in Plainville have shifted over the last decade, they are perhaps better understood as part of a broader trend in a region whose proximity to Boston, Worcester, and Providence makes it attractive to certain types of development.

Introduction

Through the expansion of the casino industry in the Commonwealth, many stakeholders welcomed the expansion of gambling as a source of jobs, revenue, and economic growth. In November of 2011, Governor Deval Patrick signed the Expanded Gaming Act into law, allowing for the creation of up to three commercial resort-style casinos in the state and one slots parlor, all of which promised transformative economic revitalization to their host and surrounding communities.

In 2014, discourse around the licensure process was frequently framed around a broader context of economic revitalization across the Commonwealth, citing the presence of a casino as the catalyst. Everett Mayor Carlo DeMaria saw the licensure as the end of an era for Everett, commenting that “This is a great day for the city of Everett. It is a tremendous day, and I could not be any happier,” he said. “We will no longer be the butt end of Boston, we’ll be the entrance to the city of Everett.”¹ A similar storyline unfolded in Springfield, with locals seeking a push out of the Gateway City’s economic slump. Gaming executives saw the “value of a casino resort as a unique economic development catalyst” for the area, and locals saw the project as the beginning of their “comeback story” of urban revitalization.² Communities such as Leominster that did not win licensure felt that the loss was that of missed opportunity to expand their local economies, expressed by then-Massachusetts Gaming Commission (MGC) Chairman Stephen Crosby “I think we’re missing the boat on a real good opportunity for a part of the state,” said Crosby. “I think the Leominster folks understood how to take this project and make it a potential engine for economic development in an area that needs economic development badly.”³ Assessing the presence of an economic catalyst is a particularly elusive process, however, as the indicators that might show evidence of transformation are not independent of other ongoing market conditions. Nonetheless, analysis begins with tracking important components of local economies, in particular, the commercial real estate market.

Over the course of the last five years, the Social and Economic Impacts of Gambling in Massachusetts (SEIGMA) team has periodically released reports detailing the real estate conditions in Massachusetts’ three casino host (Plainville, Springfield, and Everett) and surrounding communities. The purpose of these reports is to track how real estate conditions have changed over time and, when possible, determine what share of that activity can plausibly be attributed to the casinos. This report describes real estate conditions in the host and surrounding communities that are home to the Commonwealth’s three casinos: Plainridge Park Casino, MGM Springfield and Encore Boston Harbor. More specifically, the focus for this report is on commercial real estate conditions in host and surrounding communities from the beginning of 2010 until the end of 2020.

¹Jamy Pombo Sesselman, “Wynn’s \$1.6B Resort in Everett Wins Casino License,” *WCVB Boston*, September 16, 2014, <https://www.wcvb.com/article/wynn-s-1-6b-resort-in-everett-wins-casino-license/8208255>

² Jake Blumgart, “Why Opening A Casino Is a Terrible Idea,” *Pacific Standard Magazine*, June 14, 2017, <https://psmag.com/economics/atlantic-city-las-vegas-opening-casino-terrible-idea-85025>

³ Jack Minch, “Leominster Loses to Plainville by a Nose in Slots-Casino Sweepstakes,” *Sentinel & Enterprise*, February 27, 2014, <https://www.sentinelandenterprise.com/2014/02/27/leominster-loses-to-plainville-by-a-nose-in-slots-casino-sweepstakes/>.

For our purposes, commercial real estate should be thought of as all non-residential real estate activity, including the development, leasing, and sale of non-residential buildings and space. Some prominent types of non-residential space include office, industrial, retail, and healthcare space. Since casinos are, themselves major commercial real estate developments and tend to be located in parts of communities designated for commercial activities, it is important to understand how commercial real estate conditions have evolved in these communities. A major shift in real estate conditions could be a sign of the sort of transformative economic revitalization that many key stakeholders expected or hoped for prior to the expansion of gambling. We pay particularly close attention to whether trends in real estate markets diverged after gaming licenses were awarded to casinos, or after casinos opened to the public. We also look for instances where a host community's trend diverges from the statewide trend or other local trends over time. These divergences would be evidence that the casino caused commercial real estate conditions in the area to change in a way that otherwise may not have occurred.

Assessing commercial real estate conditions can be challenging. While residential real estate data are abundant, commercial data are far scarcer. One factor in that scarcity is that most commercial entities lease their space, and real estate leases are not as meticulously recorded in public records as real estate sales. Access to The CoStar Group data provides the SEIGMA team with the ability to analyze market trends in these areas to provide an indication of the health and nature of an area's economy. However, the data available to the SEIGMA team for this report are not appropriate for facilitating a formal statistical analysis due to the paucity of observations for each community. As such, much of this report focuses on comparisons of economic trends in different communities, and relies on the qualified inference of the authors where a more thorough statistical analysis would not be appropriate (see the Methodology section for additional details). Even when it is difficult to directly attribute a change in local real estate conditions to the expansion of gambling in Massachusetts directly, the SEIGMA team believes these reports are helpful in providing context into the real estate market prior to the opening of the casinos, and how they have changed since the opening of the casinos, as well as the evolving economic development context in the host and surrounding communities around the Commonwealth.

In 2020, the latest year of our study period, the commercial real estate market was heavily disrupted by the COVID-19 pandemic. While the pandemic and its impacts on the market are not the primary focus of this report, we periodically refer to it in order to provide context to dramatic shifts in the real estate market which are more likely to be COVID-related than casino-related. As the COVID crisis is still evolving at the time of this report, it is not possible to precisely state the effect of the pandemic on commercial real estate in the long term.

Methodology

For the most part, this impact evaluation uses a comparative approach. It considers changes in the host communities before and after the award of the casino's gaming license and the opening of the casino. It then compares these observed changes to the casino's designated surrounding communities, which are facing similar market conditions but whose own commercial real estate markets are unlikely to be impacted by the casino development, and the Commonwealth as a whole. This approach is necessary because other events that have little or nothing to do with the specific development, such as changes in national and state economic cycles, can have a considerable impact on local market conditions. Without accounting for these external forces, one can easily misattribute apparent changes in commercial real estate market conditions to the casino development.

While the field of economics has developed advanced statistical methods for isolating the extent to which a particular shock affects an economic indicator, those methods typically require hundreds, if not thousands of observations, which are not generally available in the data being analyzed for this report. For most of the report, the main unit of analysis is municipalities (for example, vacancy rate in Everett compared to nearby Somerville or Boston). While statistical methods are used in a limited capacity when analyzing property level data, most of this report relies on the presentation and interpretation of descriptive statistics. This has been the case in all previous SEIGMA real estate reports.

CoStar Data

This report analyzes the host and surrounding communities' commercial real estate inventory, the extent to which that space is utilized, and the sale or lease price of the space. We also examined the relationship between geographic proximity to the nearest casino and price. We focus on whether there have been any observable changes following the license award and opening of any of the three casinos. This report makes extensive use of data from CoStar to provide information on indicators not generally tracked in publicly available data sources. CoStar is a leading provider of commercial real estate information. Data are available for most of Massachusetts on a quarterly basis from 2008 to the present.⁴ Quarters in CoStar are based on calendar years rather than fiscal years. For the purpose of analyzing commercial real estate, the SEIGMA team pulled all non-residential property types in the CoStar database, such as office, retail, flex (a CoStar definition for versatile, multi-use buildings), industrial, health care, and sports and recreation. Residential uses such as apartment buildings and student dormitories, as well as land, were excluded from the analysis. This analysis covers the 10-year period between the first quarter of 2010 and the last quarter of 2020.

This real estate report leverages the CoStar data in a new way, utilizing address-level data to analyze sales of commercial real estate. CoStar's property-level data features a last sales date and last sales price for every commercial building in the database. While some commercial buildings have certainly been sold more than once over the last decade, commercial real estate sales are infrequent enough that these data can be used to show how sales activity and sales prices have changed over the course of the study period.

⁴ For more information about CoStar Group Inc. and the CoStar database, please visit <http://www.costar.com/>. The data used for this analysis are not available for download without a CoStar subscription.

While expansive, detailed and timely, CoStar is not a representative sample. Furthermore, CoStar is somewhat opaque in describing its data collection and estimation methods, so it is difficult to identify possible biases in the data or how sensitive the reported data is to changing market conditions at the ground level. We proceeded with our investigation of recent trends in commercial real estate in the host and surrounding communities relative to the Commonwealth on the assumption that CoStar provides a valid, albeit incomplete, indicator of changing commercial real estate market conditions.

Measures

Data on commercial building inventory forms the basis for our understanding of the supply side of the commercial property market. In other words, it tells us how much commercial space is available for use and whether that amount of space has changed over time. Inventory data is provided in two ways. First, we present data on the overall building inventory in the host and surrounding communities, as well as the Commonwealth. We also provide data on commercial building square footage. By analyzing both sets of data, we are able to see how building inventory changed both in terms of units and actual square footage available for use, providing a fuller picture of commercial building inventory than just units alone.

Second, we analyze data on commercial vacancy rates. Alongside inventory, vacancy is an important measure to consider when analyzing the commercial real estate market. While inventory data tells us about the supply aspects of commercial real estate in a community, vacancy, along with lease rates, informs us about the level of demand for that real estate. Specifically, vacancy data helps us to understand the level to which a community's commercial real estate inventory is being utilized. For example, an increase in inventory accompanied by a rise in vacancy signals that new real estate is not being immediately occupied. It is important to note that vacancy is based on square-footage, rather than units, which means that the opening or closing of a small number of large buildings can lead to large changes in vacancy.

Price is another important factor when analyzing the commercial real estate market. Most commercial real estate transactions take place in the form of leases rather than the outright purchase of space. The CoStar Group provides data on overall lease rates, as well as more detailed data on several common types of leases. For this analysis, we include data on average lease rates by all service types.

The CoStar Group also provides transaction-level data on sales of commercial properties. In this report, the SEIGMA team analyzed those data, which had not been utilized in prior SEIGMA real estate reports. We analyzed commercial property sales data in several ways, looking at areas of analysis included the number of transactions annually, where they took place, the sale price per-square-foot, and the correlation between sale price per-square-foot and distance to the casino. Taken as a whole, these data provide insight into the level of investor interest in a community, and how that level of interest has changed over the study period.

Encore Boston Harbor

Community Profile

The city of Everett is located in Middlesex County, four miles north of Boston along the Mystic River. Formerly connected to Boston by the Orange Line from the early 1900s until 1975, Everett is known as an inner suburb or streetcar suburb of Boston. While Everett has many types of businesses today, its economy and infrastructure originally developed around industrial production starting in the late 1800s. Despite being located close to the heart of a metropolitan area that has experienced a substantial economic boom in recent years, driven in particular by activity in Boston and Cambridge, Everett remains a ‘blue-collar’ community.

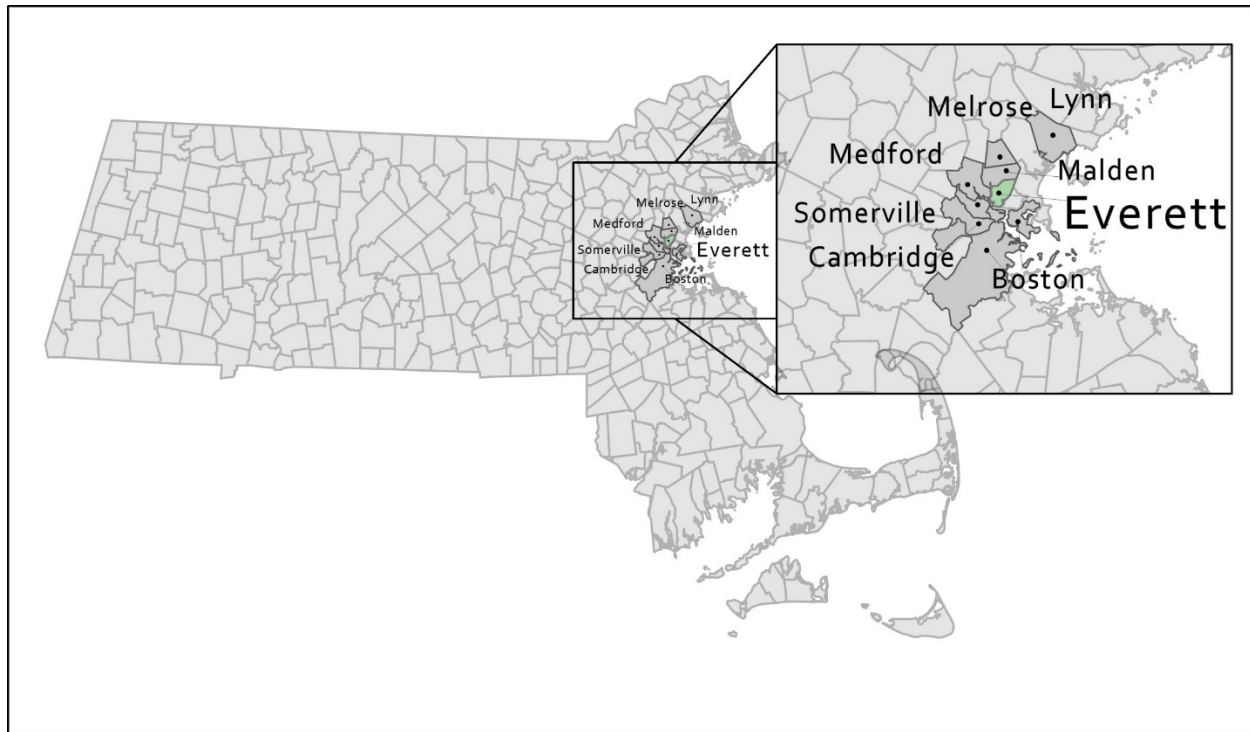
Everett occupies a total area of 3.66 square miles and has a population density of 12,692 people per square mile. The population of Everett is estimated at 46,451 residents. Everett has had several waves of incoming immigrants since its founding. In the past few decades, new immigration has again brought change to Everett’s demographics, with more than 40 percent of residents born outside of the US. As a midsized, post-industrial city with lower household incomes and levels of educational attainment, Everett is recognized by the Commonwealth as a Gateway City. A high school diploma is the most common educational level. Just over a quarter of residents over the age of 25 hold an Associate, Bachelor’s, graduate, or professional degree. The wages, education levels, and English-language proficiency of Everett residents are lower than the Commonwealth as a whole.

Surrounded by other suburbs of Boston such as Malden and Revere, proximity to Boston necessarily links Everett’s economy and infrastructure with the rest of the Metro Boston area. While Everett is the most common place for residents to work, many commute to jobs in Boston and its surrounding cities. The primary industries that drive employment in Everett are accommodation and food services, retail trade, health care and social assistance, and finance and insurance. In terms of its tax base, the city’s assessed property values for industrial properties are declining. Nevertheless, residential and industrial properties are still the predominant sources of Everett’s tax revenue.

The Commonwealth’s third casino, Encore Boston Harbor was licensed on September 18, 2014 as a Category 1 (resort style) casino. Encore Boston Harbor was built on a 33-acre former industrial site on the Mystic River, in the southern part of the city. The site, which had not been in use since the 1990s, required substantial environmental cleanup efforts before development could begin. After several years of work on the site, Encore opened its doors to patrons on June 23, 2019. Most of the casino’s immediate neighbors are large retail or industrial sites, with most of Everett’s residential areas located to the north. Outside of a few chain restaurants, there are few other hospitality-sector establishments in the immediate vicinity. While the presence of Encore Boston Harbor may have important economic implications in terms of employment, vendor spending, and tax revenue for Everett and its surrounding communities, its relative isolation from other sorts of customer-facing commercial real estate may limit its impact on community-wide real estate metrics such as vacancy or average lease rates.

An important consideration in evaluating the impact of Encore Boston Harbor is its proximity to major commercial centers like Boston, Cambridge, and Somerville, which experienced rapid rates of economic

growth over the past decade, much of which is related to a boom in industries such as healthcare, biotech, and education. Because of the economic boom experienced by the larger region, while the casino is a significant investment, it is hard to disentangle the effects of the casino directly from the broader economic development trends enjoyed throughout the Greater Boston region.



Everett's designated surrounding communities, per the Massachusetts Gaming Commission, are Boston, Cambridge, Lynn, Malden, Medford, Melrose, and Somerville. Two of Everett's immediate neighbors, Chelsea and Revere, are not counted as official surrounding communities. Boston, which lies to the south of Everett across the Mystic River, is the commercial and political capital of the Commonwealth, and the economies of Everett and its remaining surrounding communities are closely tied to Boston's. To the north of Boston, Cambridge is an economic power in its own right, with major universities and associated research, biomedical, and pharmaceutical firms based there, and it features some of the most expensive real estate in the Commonwealth. Adjacent to Cambridge, Somerville has experienced an economic revitalization of its own over the last few decades. To the north, the communities of Malden, Medford, and Melrose have a more residential character. The remaining surrounding community, Lynn, lies to the northeast of Everett and is unique among the surrounding communities for its Gateway City⁵ status.

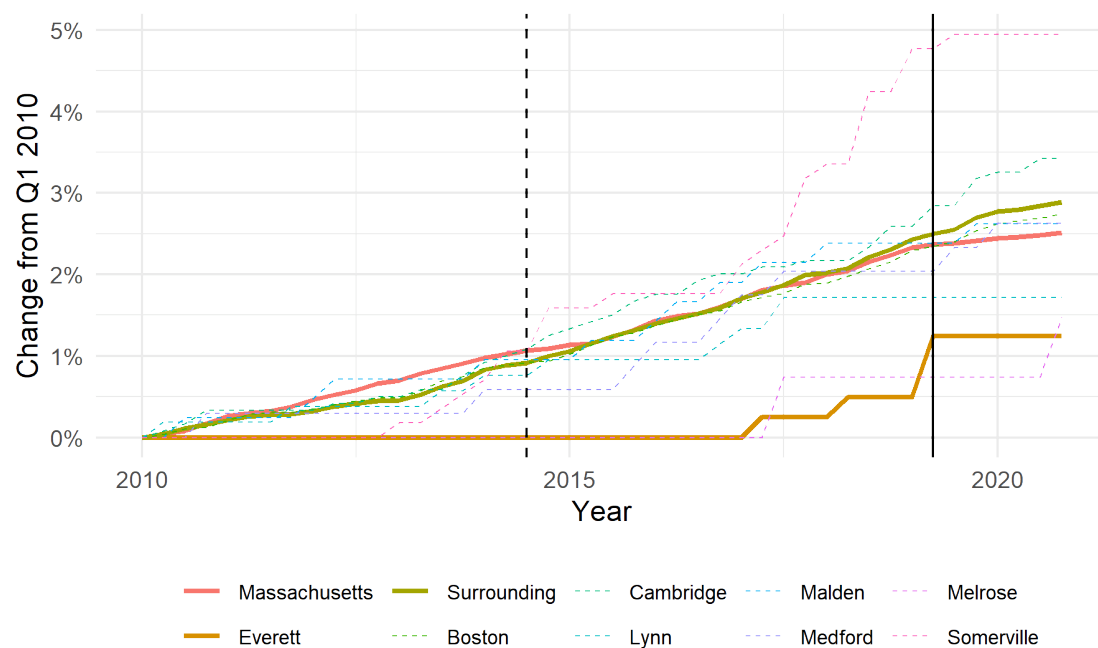
Inventory

⁵ For more on Gateway Cities, see <https://massinc.org/our-work/policy-center/gateway-cities/about-the-gateway-cities/>

Findings

- Everett has the lowest inventory of commercial real estate among its surrounding communities while Boston and Cambridge are clear leaders. This correlates with their higher resident population and number of jobs when compared to Everett itself and other surrounding communities.
- Inventory in the commercial real estate market has grown in Everett since 2010, and the inventory growth in Everett's surrounding communities makes up more than half of the growth for the Commonwealth during this period.
- The amount of available real estate space increased by square footage as well, and in many cases at a faster rate than the increase in commercial buildings. This is unsurprising in this part of the Commonwealth, as commercial buildings erected in Greater Boston tend to be larger on average than those built in other parts of the state.

Figure 1: Change in Commercial Building Inventory, Everett and Surrounding Communities, Q1 2010 - Q4 2020

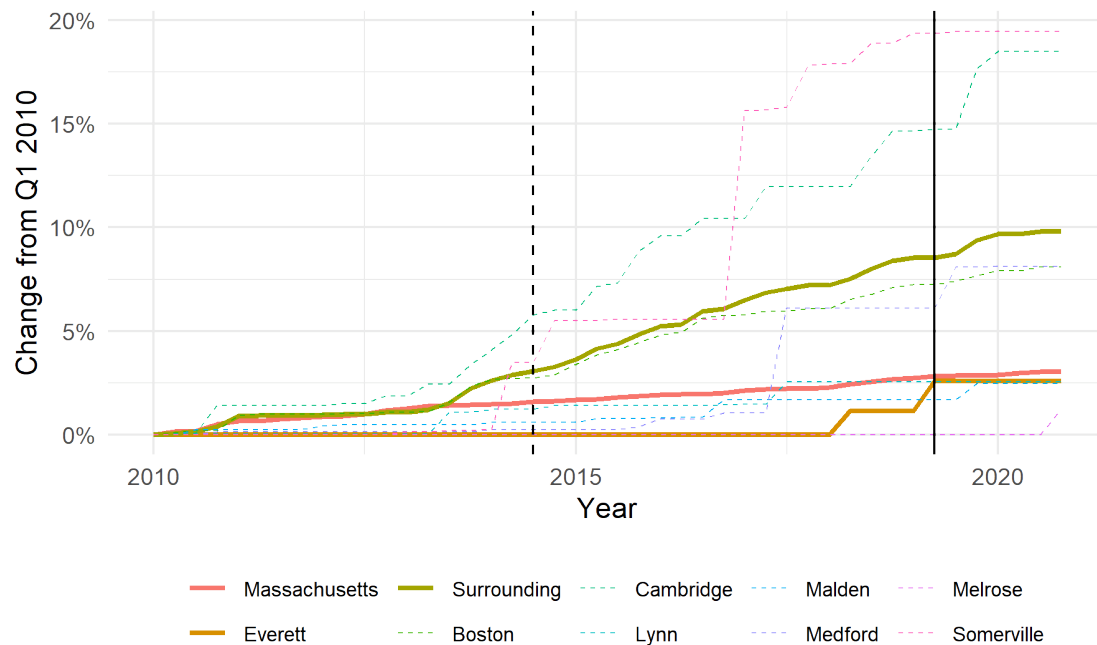


*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Commercial building inventory in Everett remained constant from the first quarter of 2010 until the second quarter of 2017, when one commercial building was added. As of the fourth quarter of 2020, only five commercial buildings have been added to the inventory. At least some of that growth in inventory can be directly attributed to the construction of Encore Boston Harbor, and it is possible that the casino may have played a role around the remaining buildings, given the proximity to the casino's opening. Over the same period, Everett's surrounding communities erected commercial buildings at a

rate comparable to that of the Commonwealth overall, growing their commercial building inventory by just under three percent. It is also important to note that the surrounding communities make up a large share – 59 percent as of the fourth quarter of 2020 – of the commercial building inventory in the Commonwealth, so to some extent it is the surrounding communities that are driving the statewide trend.

Figure 2: Change in Commercial Building Square Footage, Everett and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

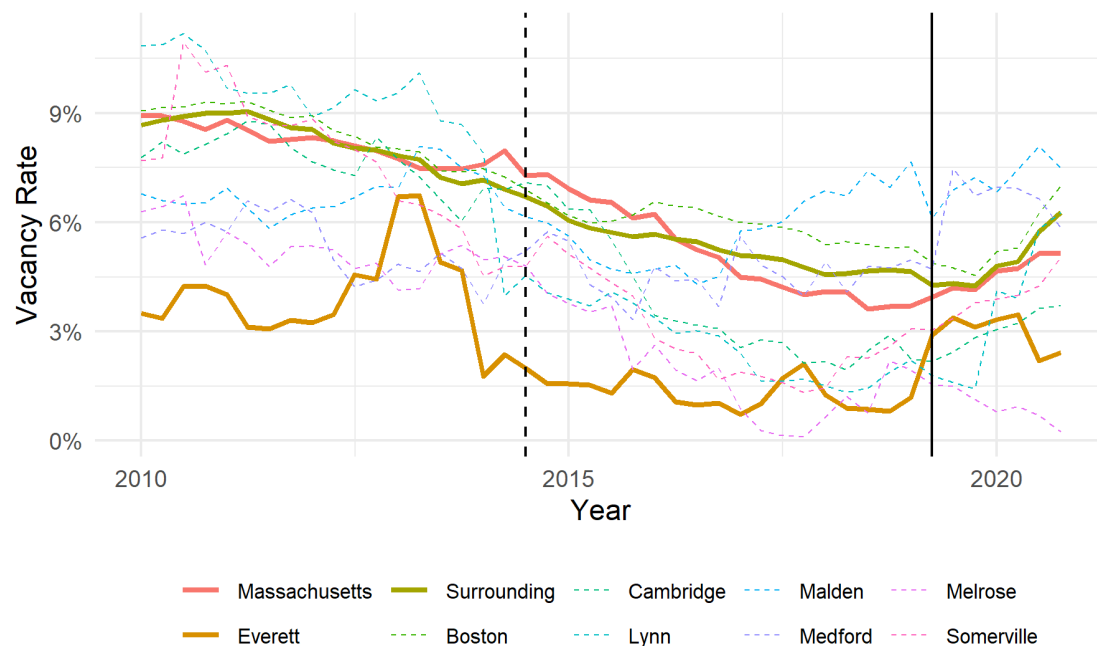
The rate of growth in commercial real estate square footage in Everett between 2010 and 2020 was comparable to that of the Commonwealth over that same period, with a key distinction being that all the growth in Everett occurred between 2018 and 2020. While the inventory of commercial buildings in the surrounding communities has grown at a similar rate to that of the Commonwealth overall (as shown in Figure 1), the amount of commercial square footage available has grown much faster in the surrounding communities, and Everett's rate of growth is among the lowest in the region. While the amount of commercial square footage in Massachusetts increased just two percent from its 2010 basis, it grew by just under ten percentage points for surrounding communities, with much of that growth driven by very high rates of growth in Boston and Cambridge. This indicates that the commercial buildings being erected in the surrounding communities are larger on average than those being built elsewhere in Massachusetts.

Vacancy

Findings

- Everett's commercial vacancy rate has risen and fallen more sharply since 2010 than its surrounding communities or the Commonwealth, likely due to the relatively small commercial building inventory when compared to some of its surrounding communities.
- Vacancy rates in Everett and its surrounding communities tracked that of the Commonwealth, suggesting that statewide or national economic patterns are an important predictor of local commercial vacancy.
- Comparatively, Everett experienced lower vacancy rates than its surrounding communities over the years, which is likely due in part to intense use of its relatively smaller commercial inventory.

Figure 3: Commercial Vacancy Rate, Everett and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

While the commercial vacancy rate of the surrounding communities has tracked very closely to that of the Commonwealth, Everett's vacancy rate has consistently remained below both. In almost every quarter of the study period, Everett's commercial vacancy rate was among the lowest in the region. Everett's vacancy rate, along with the vacancy rates of many of its individual surrounding communities, was also much more volatile than the Commonwealth or surrounding communities. An increased level of volatility is to be expected in any smaller geography, and this is likely more pronounced in Everett due to the composition of Everett's building inventory, which is comprised of a much smaller number of relatively large buildings. Under those conditions, the opening or closing of a small number of buildings

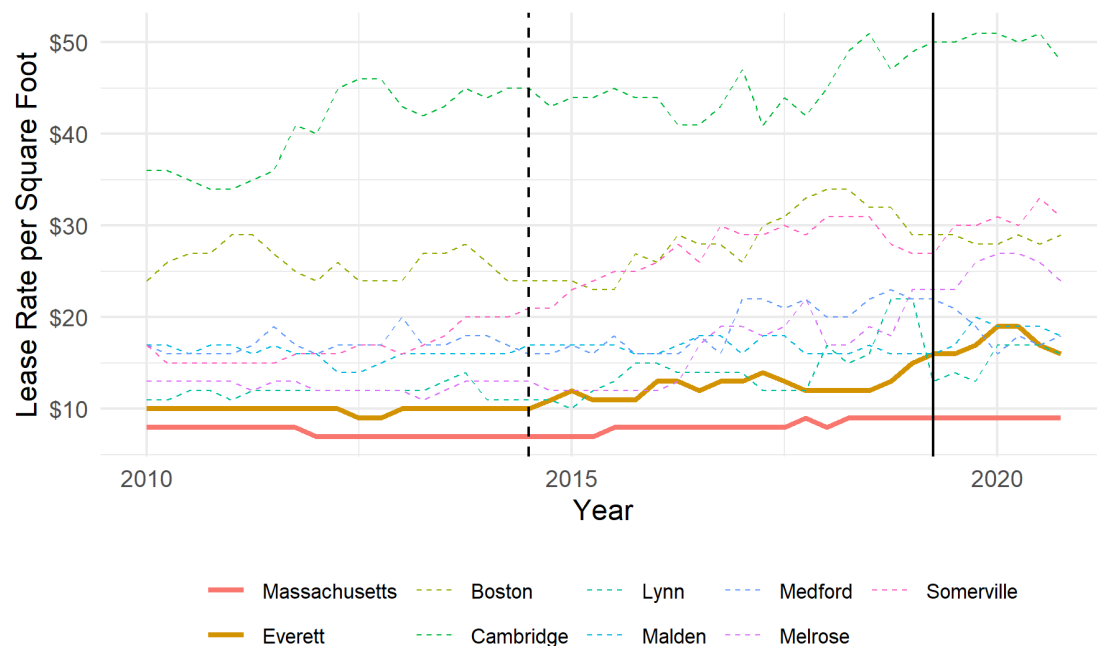
can lead to a large change in the vacancy rate. Despite the increased volatility, it does appear that vacancy rates in Everett and the surrounding communities rose and fell in tandem with those of the Commonwealth, suggesting a sensitivity to broader economic trends.

Lease Rates

Findings

- Inflation-adjusted lease rates increased slightly since 2010 in Everett and most of its surrounding communities typically saw rates above that of the average for the Commonwealth.
- Everett consistently had among the lowest lease rates of all the communities in the region. Major commercial hubs like Cambridge, Boston, and Somerville tended to have consistently higher lease rates than many of the other surrounding communities.

Figure 4: All Service Type Lease Rates, Everett and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

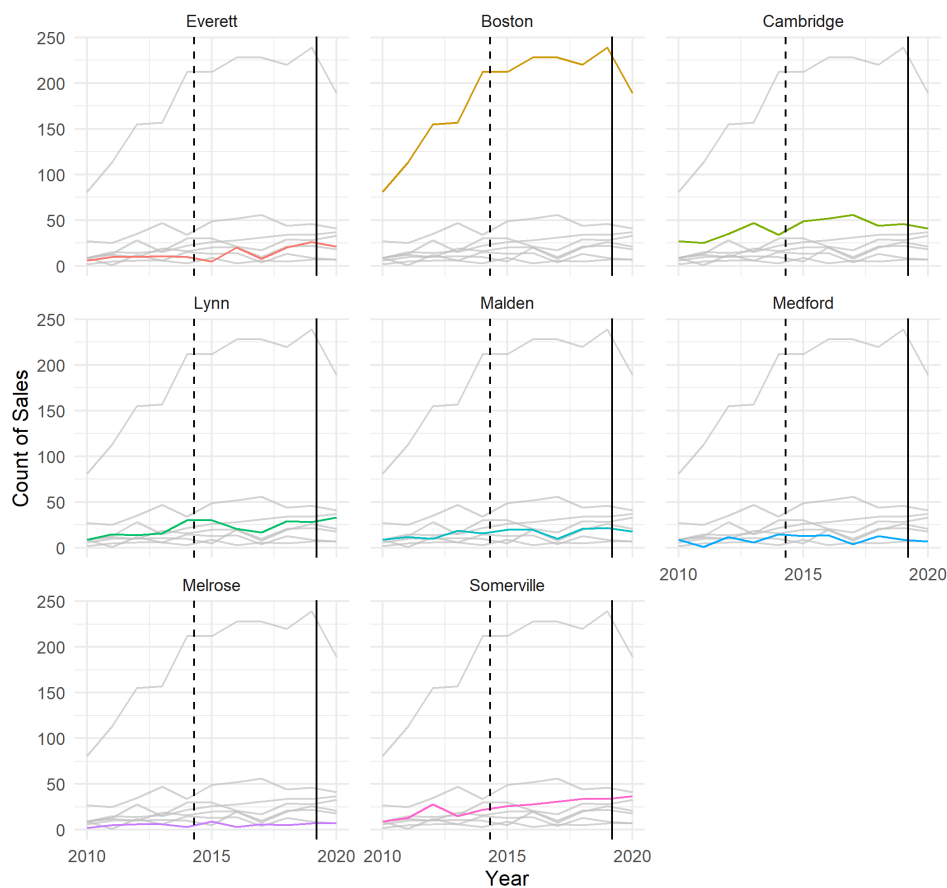
As is shown in the above figure, inflation-adjusted lease rates in Everett have consistently been among the lowest in the area, and have risen somewhat since Wynn Boston Harbor's license was awarded. Despite this, Everett's average lease rates were still consistently higher than the statewide average. While the overall changes in lease rates in Everett are similar to that of many of its surrounding communities over the course of the last decade, it is true that most of that growth did occur in the quarters leading up to the opening of Wynn Boston Harbor.

Sales of Commercial Properties

Sales of Commercial Properties

- Annual sales of commercial buildings increased steadily in Everett and most of its surrounding communities and were most common in Boston.
- The sale price-per-square-foot increased steadily over time, which is likely a product of supply and demand (recall that the inventory in Everett did not increase substantially).
- Price-per-square-foot for commercial buildings in the region is slightly negatively correlated with distance from Encore Boston Harbor, but this correlation existed well before Encore was awarded a license and has not changed substantially since its opening.

Figure 5: Sales of Commercial Properties, Everett and Surrounding Communities, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

As the above figure shows, sales of commercial properties did increase in Everett after Encore Boston Harbor was awarded its license. Many of Everett's surrounding communities also saw a modest increase

in the number of sales of commercial buildings, although Boston stood out as the clear outlier in this area, likely due to its geographic size, large population, and status as a hub for jobs in the region.

Figure 6: Commercial Sales surrounding Encore Boston Harbor, 2010-2020

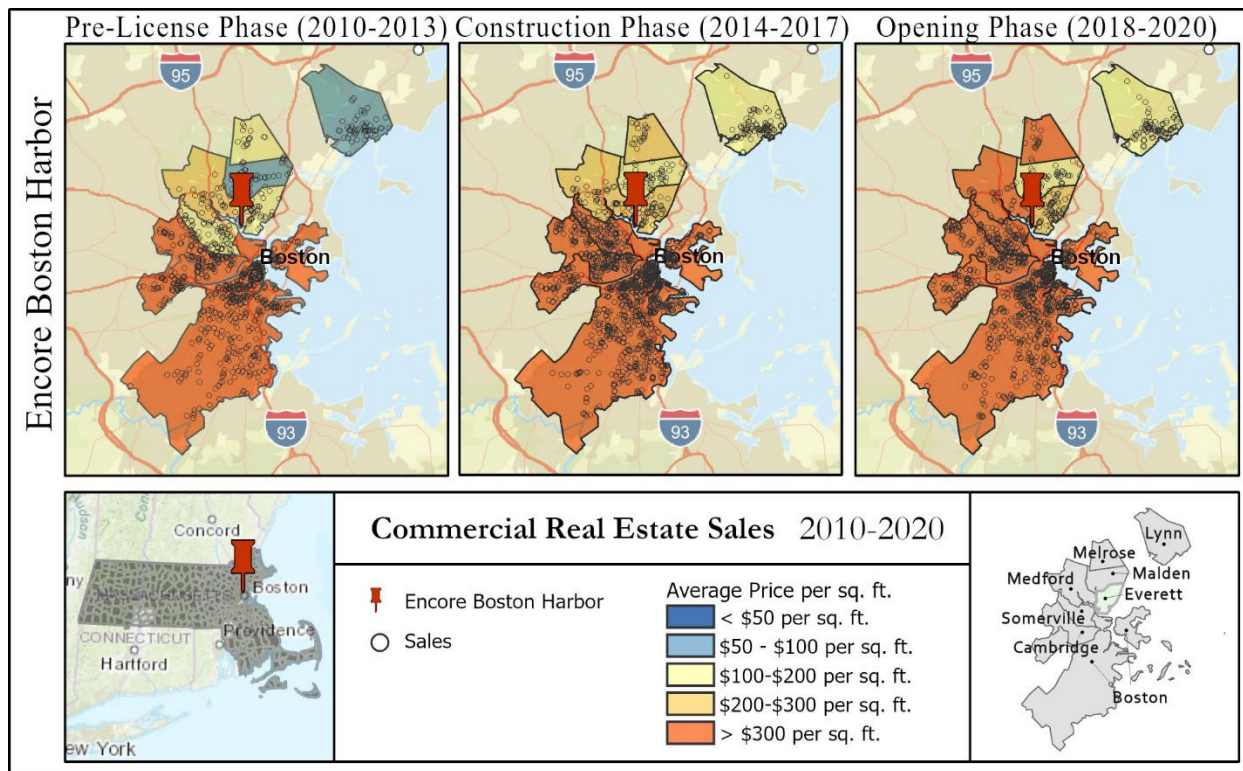
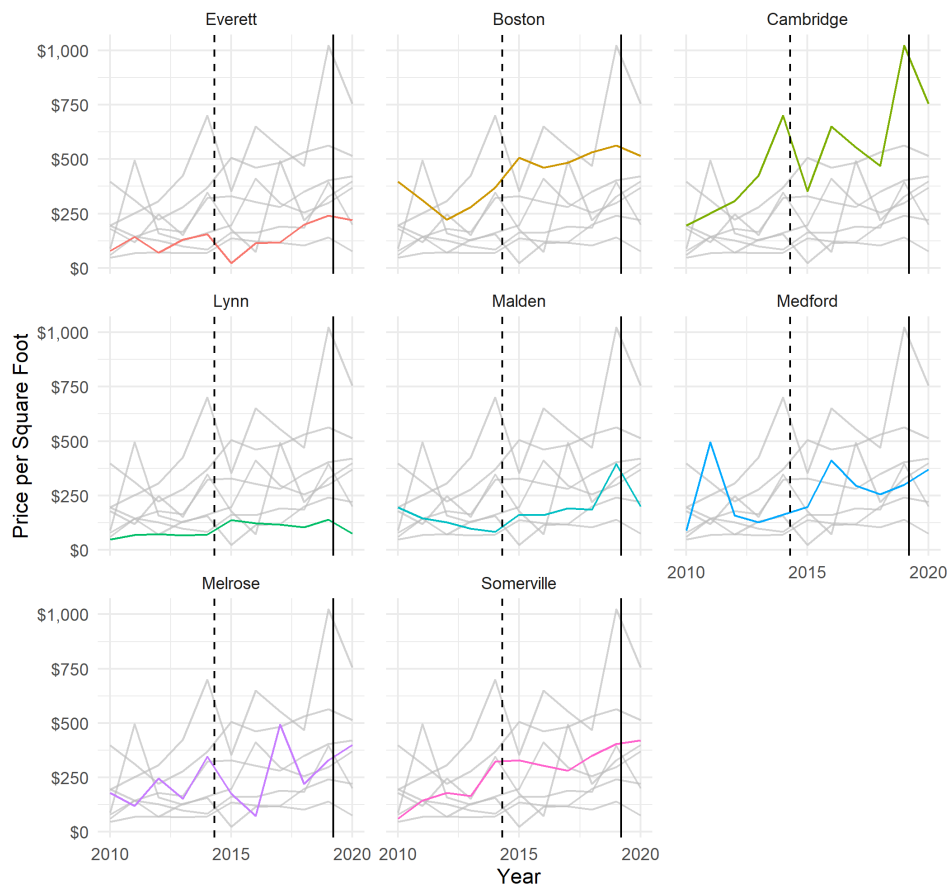


Figure 6 above shows snapshots of commercial real estate sales in Everett and surrounding communities at key intervals throughout the opening process. Due to Boston's status as a surrounding community of Everett, analysis is sensitive to the other factors that could be affecting real estate in the Commonwealth's capital and commercial hub. Overall, average price per square foot in the area has increased in the region over the last ten years.

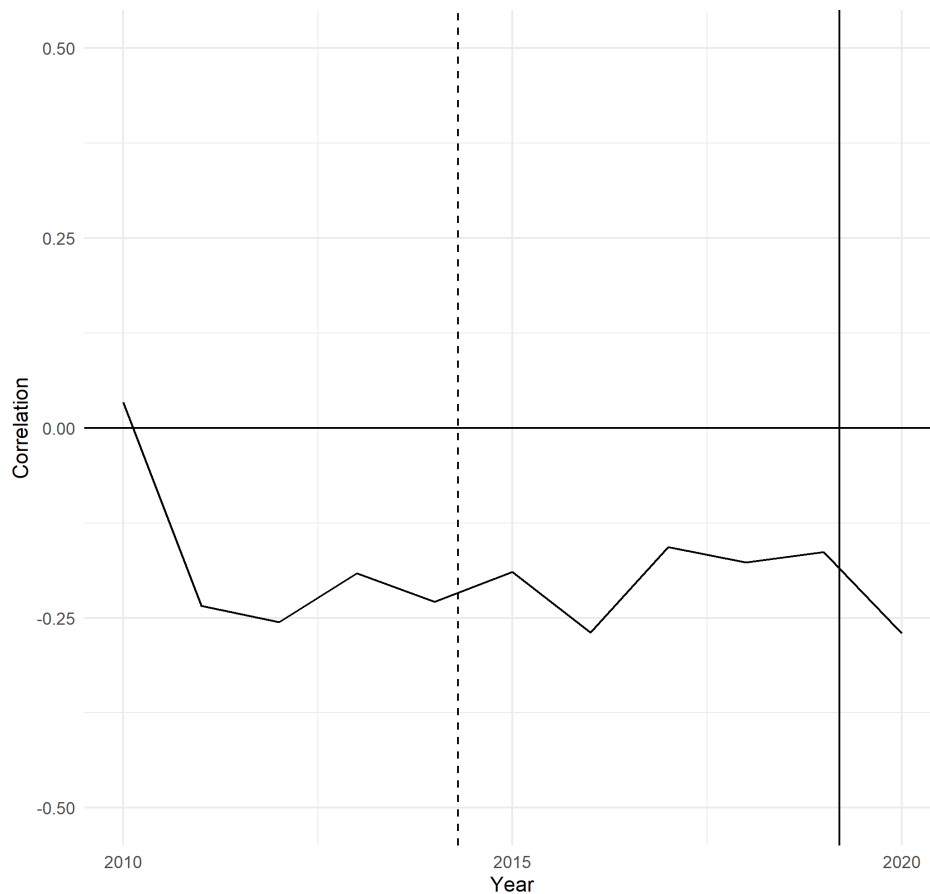
Figure 7: Commercial Sale Price-Per-Square-Foot, Everett and Surrounding Communities, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Commercial sales price, expressed on a per-square-foot basis, varied greatly across the region. In Everett, commercial sale prices remained amongst the lowest in the region, even after the opening of Encore. Despite remaining as some of the lowest in the region, commercial sale prices in Everett did increase steadily after Encore was awarded its license. Given that supply of commercial buildings did not increase in any significant way (see **Figure 1**), and the sale of commercial buildings increased steadily over this period (see **Figure 7**), it is likely that the increase in sale price is being driven by supply and demand.

Figure 8: Correlation between Sale Price-Per-Square-Foot and Distance to Encore, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

The SEIGMA team analyzed how the statistical relationship between sales price-per-square-foot and proximity to the casino changed over time. If the construction of Encore Boston Harbor did indeed have an effect on commercial sale prices in its vicinity, we would expect to see a decline in the correlation between sale price and distance to the casino. A negative correlation would indicate that properties being purchased near the casino are being sold for higher prices than those being purchased further away from the casino. As the above figure shows, the correlation between sale price and distance to Encore Boston Harbor hovered around -0.2 well before Encore was awarded a license. This negative correlation suggests that commercial properties that are further away from Encore Boston Harbor did indeed sell for lower prices, but that this relationship existed prior to Encore Boston Harbor receiving a gaming license. More importantly, the opening of Encore did not disrupt this trend. After its opening, the correlation between commercial sale price and distance to Encore did decline slightly, but not to noticeably lower levels than previous years. If this trend continues into future years, it may have some significance, but at this point it is too soon to be certain, given past volatility.

MGM Springfield

Community Profile

The city of Springfield is located in Hampden County, in the southern part of the Pioneer Valley in Western Massachusetts. Springfield is the largest city in the western part of the Commonwealth. Many innovations have emerged from the city. Since the 18th century, the Springfield Armory played an important role in the development of both engineering and weaponry. During the industrial revolution, many important inventions emerged, including vulcanized rubber, earning Springfield the moniker “City of Firsts.” It was also the birthplace of basketball. Although Springfield had a strong history of manufacturing production, its industrial base has declined significantly over the last half century.

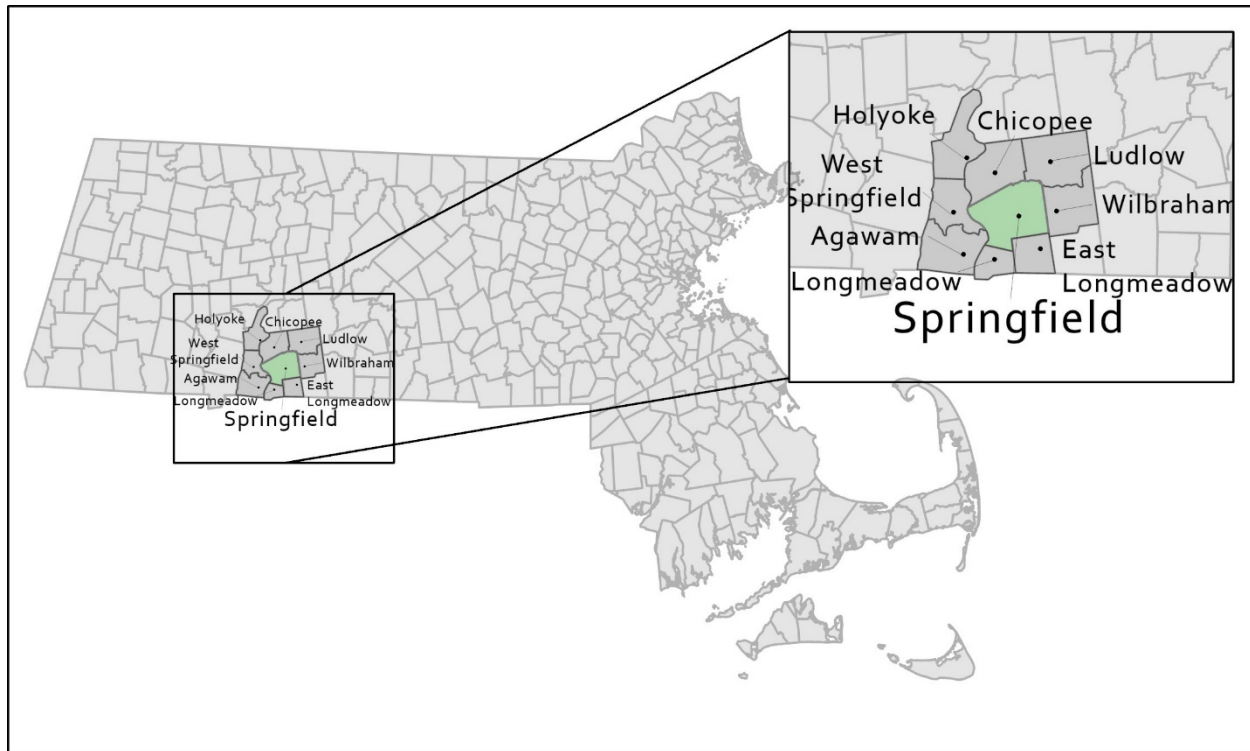
Springfield occupies a total area of 33.2 square miles and has a population density of 4,627 people per square mile. The current population is estimated at 153,606 residents. As a midsized, post-industrial city with lower household incomes and levels of educational attainment, Springfield is recognized by the Commonwealth as a Gateway City. Poverty and a lack of employment opportunities have been ongoing modern challenges in Springfield. A high school diploma is the most common educational level among residents. Just over one quarter of residents over the age of 25 hold an Associate, Bachelor’s, graduate, or professional degree. The wages, education levels, and English-language proficiency of Springfield residents are lower than the Commonwealth average.

As the most populous city in the area, Springfield is an important hub in the economy of Western Massachusetts. Just under one third of workers who reside in Springfield also work there, while many commute to municipalities adjacent to Springfield. The primary industries that drive employment in Springfield are healthcare and social assistance, educational services, accommodation and food services and finance and insurance. In terms of its tax base, the city’s assessed property values for industrial properties are declining. Nevertheless, residential and industrial properties are still the predominant sources of Springfield’s tax revenue. Springfield, and Western Massachusetts in general, were slower to recover from the Great Recession than the eastern portion of the Commonwealth. Many communities in the region have experienced stagnant or declining population over the last decade.

In June of 2011, an EF3 tornado struck Springfield and a number of its surrounding communities, killing three people and leaving hundreds homeless. One of the areas to incur the most damage from the tornado was Springfield’s South End, the current site of MGM Springfield. Some of the real estate data in this report should be understood in that context.

MGM Springfield is unique among the three Massachusetts casino properties for its central location in Springfield’s downtown. Awarded licensure on June 13, 2014, the casino is located within walking distance of many of Springfield’s largest employers and cultural amenities. The casino first opened to the public on August 24, 2018. It is also unique in that real estate within the casino’s footprint was being utilized for other purposes prior to the award of the gaming license by the Massachusetts Gaming Commission. As a result, tenants of commercial buildings within the property of the casino were forced to find new space, increasing the demand for commercial space in the area.

On the other hand, Springfield is also a much larger commercial property market than the other two host communities, and it has established itself as a major regional employment center with commercial facilities to match. As a result, the addition of another major commercial property may have less transformative effects on the citywide commercial real estate market than a similarly-sized facility might have in a smaller community.



Springfield's designated surrounding communities, per the Massachusetts Gaming Commission, are Agawam, Chicopee, East Longmeadow, Holyoke, Longmeadow, Ludlow, West Springfield, and Wilbraham. All but one of Springfield's surrounding communities (i.e., Holyoke) are directly adjacent to Springfield, and all of their economies are closely tied to that of Springfield. Springfield's surrounding communities range from affluent, heavily residential suburbs like Longmeadow, East Longmeadow, and Wilbraham to mid-sized, post-industrial cities like Holyoke, which has one of the highest poverty rates in the Commonwealth. Many of the surrounding communities, like Agawam, Chicopee, Ludlow, and West Springfield, are largely suburban in character but feature notable industrial or large retail developments. In addition to Springfield itself, Chicopee and Holyoke are classified by the state legislature as Gateway Cities.

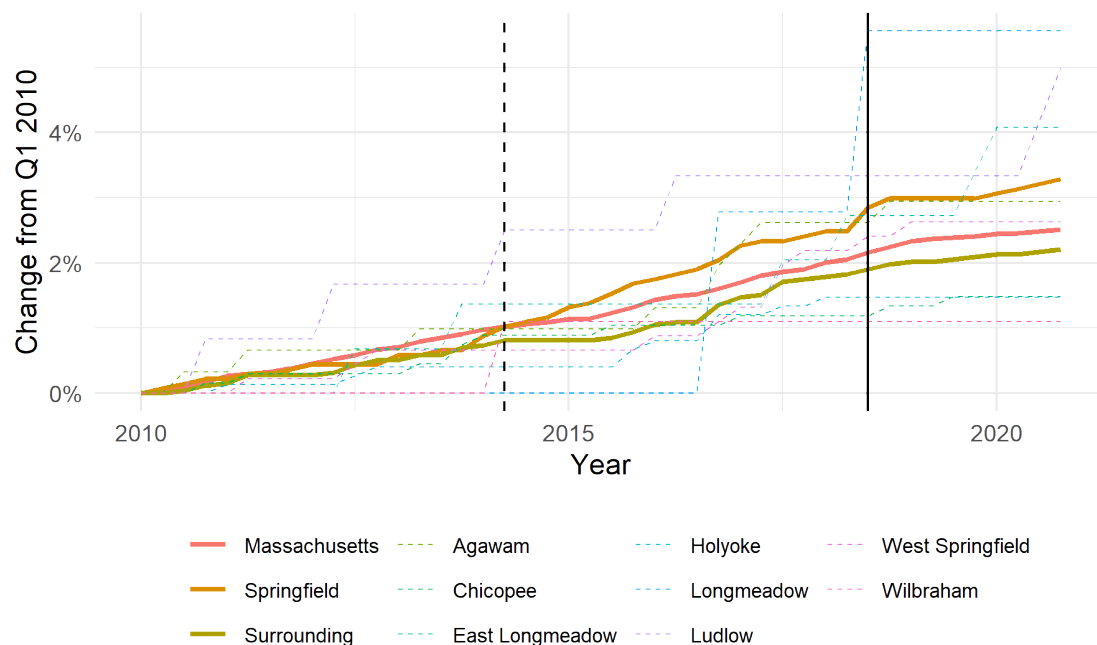
Inventory

Findings

- Inventory in the commercial real estate market has grown steadily in Springfield since 2010, with inventory in nearby surrounding communities following a similar trend.

- The rate of growth for Springfield’s commercial building **inventory** outpaced that of the Commonwealth, as well as its surrounding communities, although all three growth rates trended upwards over the ten-year period.
- The rate of growth for Springfield’s commercial **square-footage** also outpaced that of the Commonwealth and its surrounding communities as it increased since 2010.
- MGM Springfield certainly played a part in the growth in Springfield’s commercial inventory, but growth in nearby surrounding communities suggests that other regional, statewide, or national economic forces may also have played an important role.

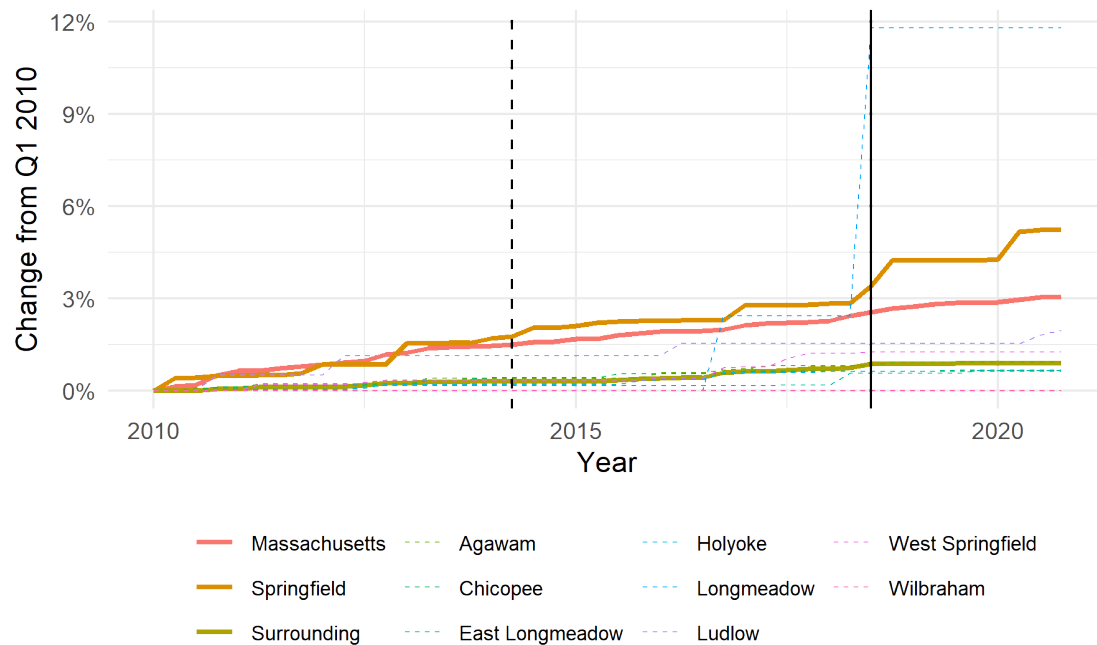
Figure 9: Change in Commercial Building Inventory, Springfield and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Commercial real estate in Springfield has grown steadily since 2010, outpacing both its surrounding communities and the Commonwealth as a whole. During this time, Springfield added 45 commercial buildings for a growth rate of just over three percent. The surrounding communities grew their commercial building inventory at a slower rate, adding 57 commercial buildings for a growth rate of just over two percent.

Figure 10: Change in Commercial Building Square Footage, Springfield and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

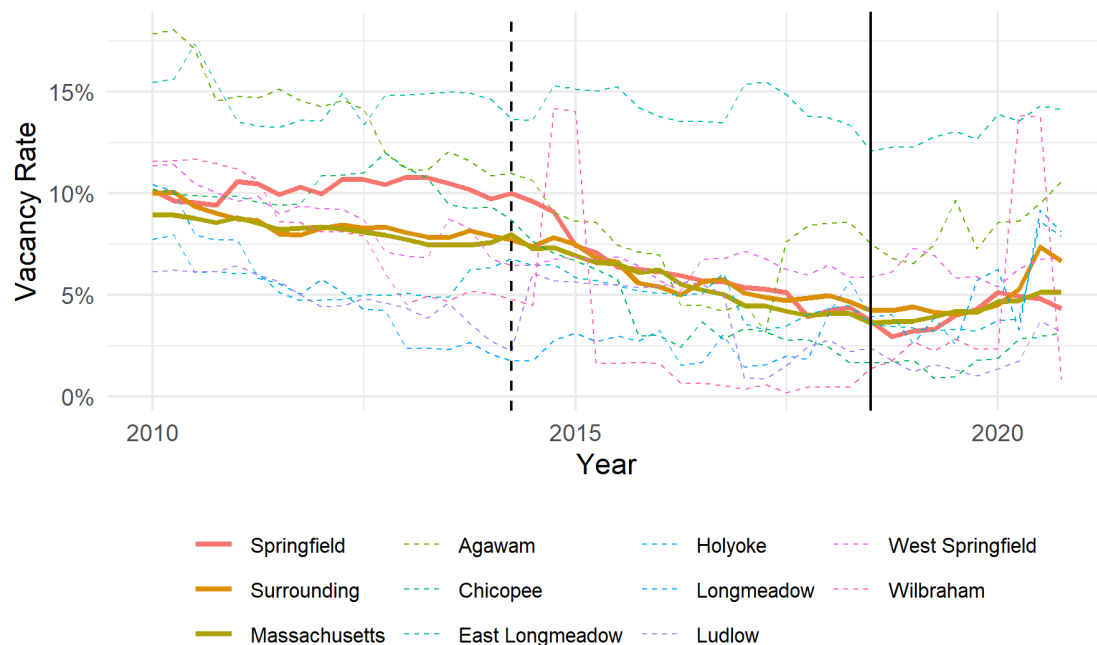
Since 2010, commercial real estate inventory in Springfield has grown in square footage by just over five percent, outpacing the statewide growth rate. Growth in commercial real estate square footage has been less rapid in the surrounding communities, growing only one percent since 2010. Much of the growth in commercial square footage that occurred in Springfield around the casino's opening may be driven by the opening of the casino itself. Beyond that, the continued growth in Springfield's surrounding communities suggests a broader regional trend of development.

Vacancy

Findings

- Vacancy rates near MGM have remained relatively steady since 2010, falling in unison with the state and other surrounding communities since the Great Recession.
- It is plausible that a drop in vacancy experienced in Springfield during the study period is directly related to MGM, as organizations displaced by the casino's substantial development footprint may have relocated to previously vacant space elsewhere in the city.

Figure 11: Commercial Vacancy Rate, Springfield and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

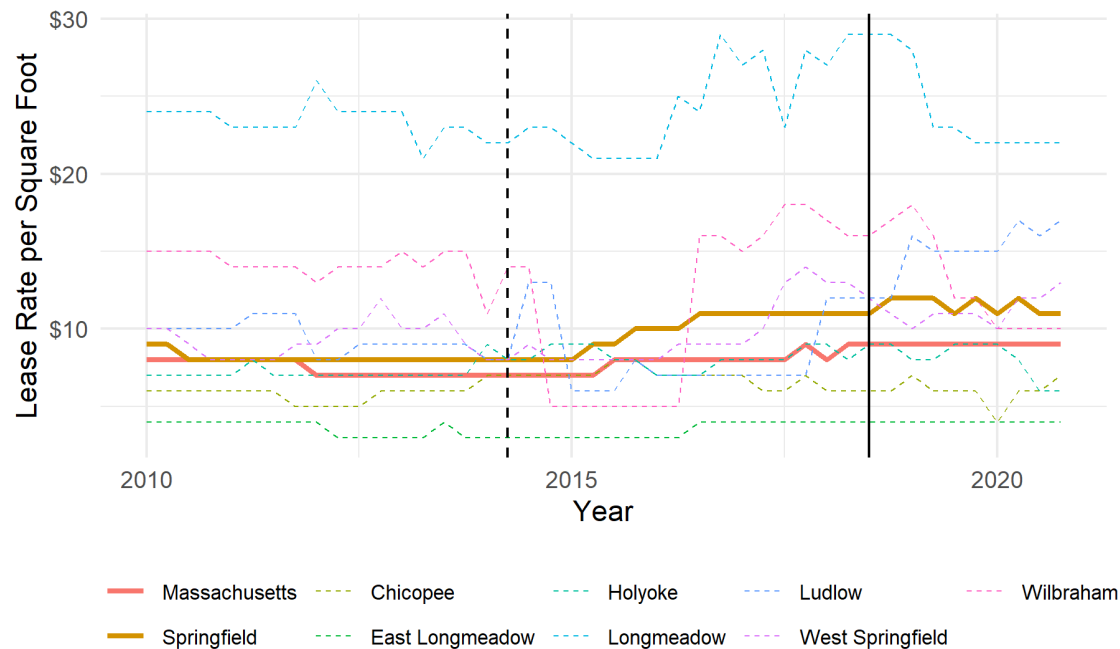
Commercial vacancy rates have fallen since the Great Recession in both Springfield and its surrounding communities, but rose somewhat over 2020. This recent upward trend began before the COVID-19 pandemic and the associated economic distress. Springfield's commercial vacancy rate was higher than that of the Commonwealth and the surrounding communities prior to the announcement of the casino, but began to fall shortly after MGM Springfield's license was awarded and was the lowest of the three by the end of 2020. MGM Springfield may have played a part here, as organizations displaced by the casino's substantial development footprint may have relocated to previously vacant space elsewhere in the city.

Lease Rates

Findings

- Lease rates in Springfield and the state remained relatively constant between 2010 and 2020 after adjusting for inflation. Though the surrounding communities saw similar patterns, many communities have always had lease rates far higher than Springfield, such as Longmeadow.
- Due to the volatility in lease rates in the surrounding communities, and the lack of any substantial change in Springfield's lease rate, it is unlikely that the opening of MGM had any substantial impact on commercial lease rates in the region.

Figure 12: All Service Type Lease Rates, Springfield and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

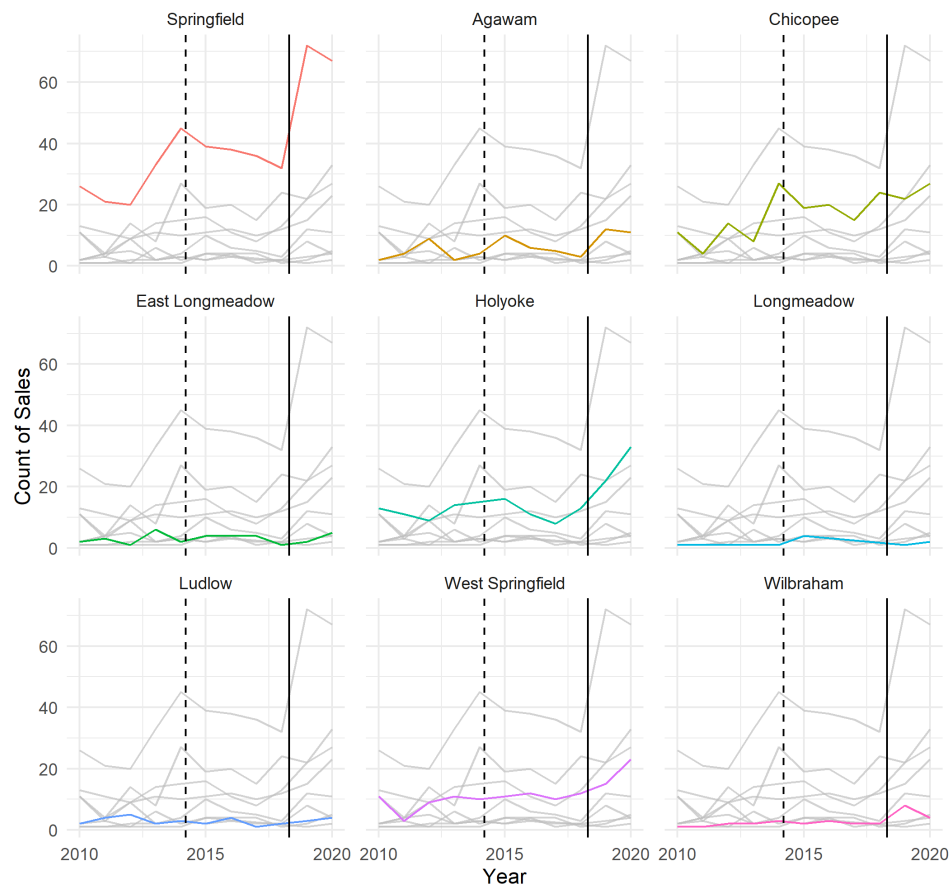
Lease rates for all service types have remained fairly consistent in Springfield and most of the surrounding communities since 2010. For most of the study period, average commercial lease rates in Springfield have been slightly higher than the statewide average, and the gap between the two has widened over the last decade.

Sales of Commercial Properties

Findings

- After a period of decrease upon the awarding of a license to MGM in 2014, annual sales of commercial properties in Springfield jumped substantially with the opening of MGM.
- While the number of sales increased substantially, the sale price-per-square foot in Springfield and the surrounding communities did not. Since 2010, commercial real estate in the Springfield area tended to sell for less than \$50 per square foot and remains largely less \$200 per square foot in 2020.
- There was no correlation between sale price-per-square-foot and distance to MGM after it was awarded its license, and this remained unchanged upon opening.

Figure 13: Sales of Commercial Properties, Springfield and Surrounding Communities, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

From 2010 to 2020, Springfield consistently had the highest number of commercial property sales in the region. There was a rapid increase in the annual number of sales in Springfield leading up to MGM being awarded a license, although it is important to keep in mind that much of that increase may be due to reconstruction after the 2011 tornado. There was a significant increase in the number of annual sales following MGM's opening. Commercial property sales also increased in the adjacent cities of Chicopee, Holyoke and West Springfield at the same time, which could indicate an increase in interest from developers in Western Massachusetts in general.

Figure 14: Commercial Sales surrounding MGM Springfield, 2010-2020

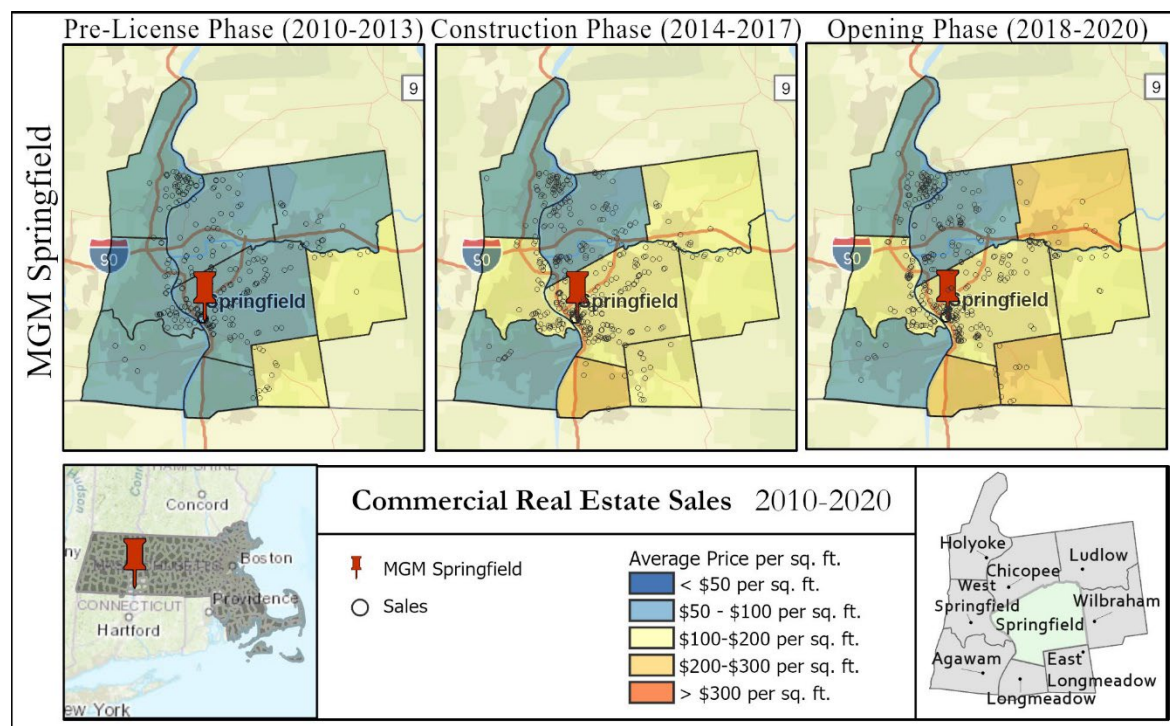
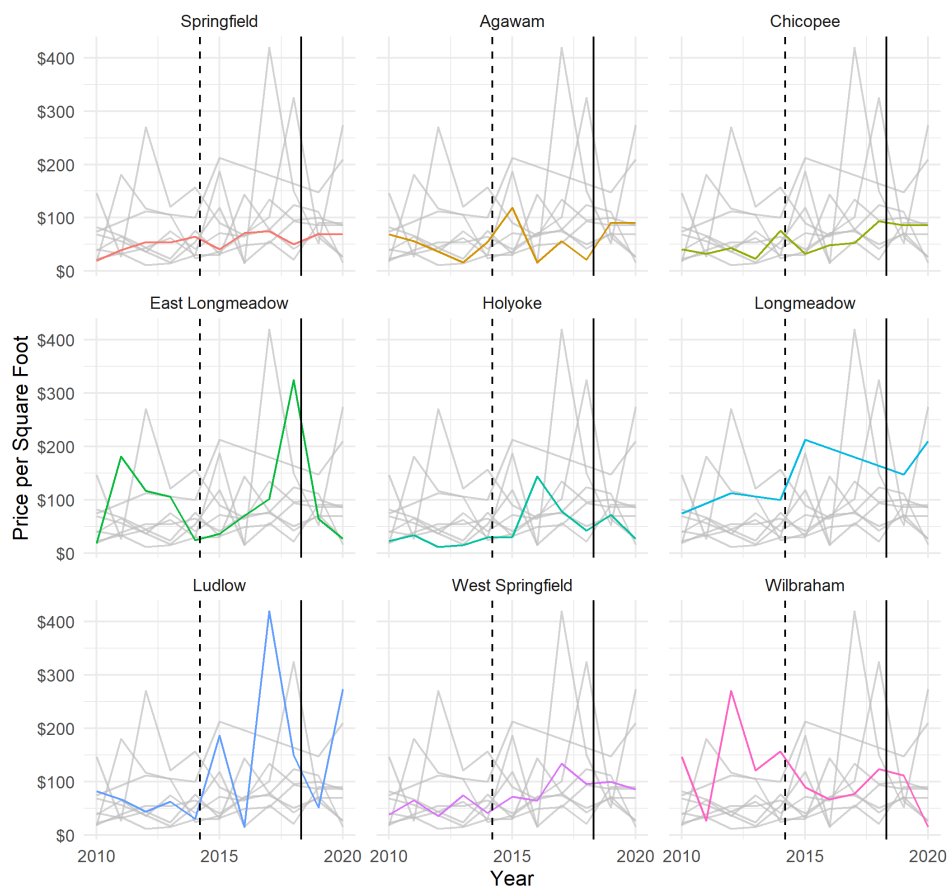


Figure 14 above shows snapshots of commercial real estate sales in Springfield and surrounding communities at key intervals throughout the casino development process. Throughout all three phases, commercial real estate in the Springfield area grew in terms of price per square foot, beginning at an average of \$88.87 in the pre-license phase and rising to \$100.82 in the construction phase and \$104.52 in the opening phase. A number of Springfield's surrounding communities saw rises in their average sales prices over the same period, and almost always less than \$200 per square foot. The majority of sales took place in Springfield itself, forming a cluster downtown near the casino, to the north in downtown Holyoke, and along interstates. Though sales with higher prices per square foot began to pop up in the construction phase, it does not appear that pricier buildings were being sold with any relationship to their distance from MGM.

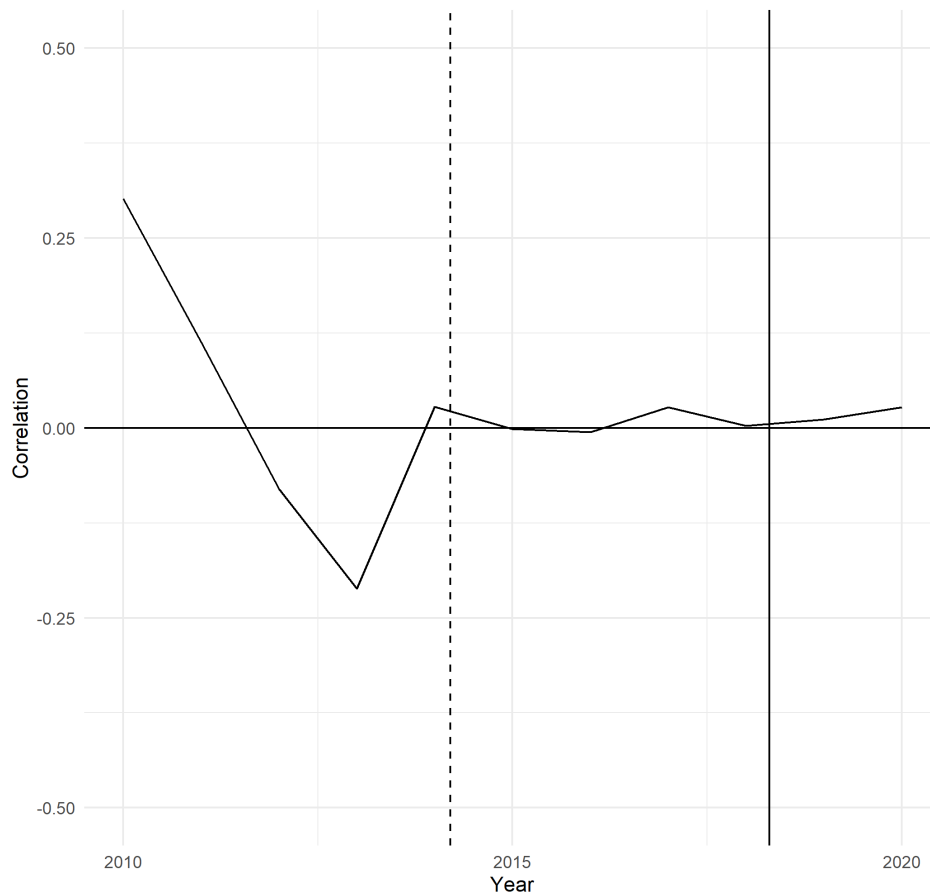
Figure 15: Commercial Sale Price-Per-Square-Foot, Springfield and Surrounding Communities, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Commercial sales prices in Springfield are amongst some of the lowest in the region on a per-square-foot basis, although they have increased substantially over the last decade, from \$19.49 per square foot in 2010 to \$69.31 in 2020. The lack of any meaningful change in sale price in Springfield, and the noisy trends in sale price in some of its surrounding communities, suggests that the opening of MGM Springfield had little impact on commercial sale prices in the region. It should however be noted that per-square-foot sales prices are not the sole determinant of lease rates in these newly-purchased properties, as a property could be purchased at a low price and then rented out at a higher price later on.

Figure 16: Correlation between Sale Price-Per-Square-Foot and Distance to MGM, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

The SEIGMA team analyzed how the statistical relationship between sales price per square foot and proximity to the casino changed over time. If the construction of MGM Springfield did have an effect on commercial sale prices in its vicinity, we would expect to see a decline in the correlation between sale price and distance to the casino. A negative correlation would indicate that properties being purchased near the casino are being sold for higher prices than those being purchased further away from the casino. As the above figure shows, this does not seem to be the case in Springfield and its surrounding communities. After experiencing a decline from 2010 to 2012, the correlation between sale price and distance to the casino consistently remained at or close to zero, indicating that there is no statistical relationship between sale price for commercial property and distance from MGM Springfield. While some of the volatility in the correlation prior to the award of the casino may have been related to speculation about its opening, it may have also been related to the development activity following the 2011 tornado which heavily damaged Springfield's South End. Had the casino caused an increase in commercial sale price in its vicinity, we would expect the correlation to decline after its license award or opening.

Plainridge Park Casino

Community Profile

The town of Plainville is located in the southwestern part of Norfolk County, on the border with both Bristol County and Rhode Island. It is one of the newest towns in Massachusetts, having separated from Wrentham in 1905. The closest large city is Providence, Rhode Island, 18 miles to the southwest.

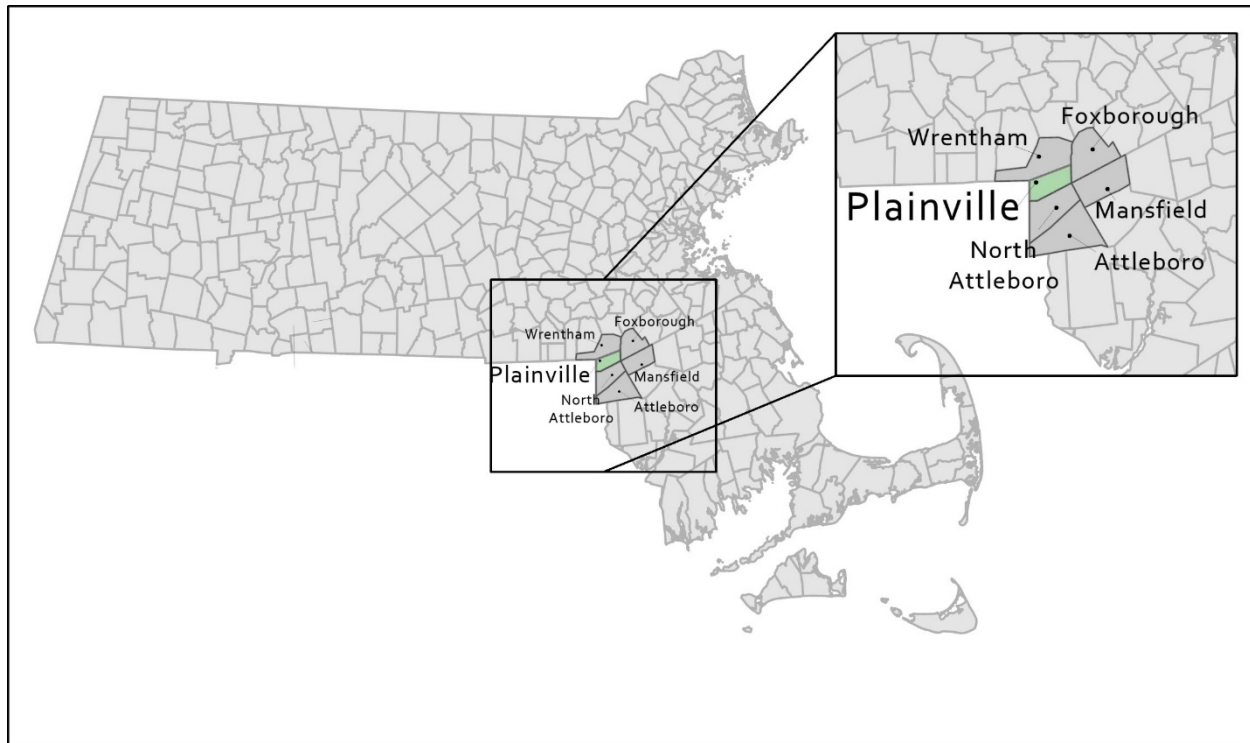
Plainville occupies a total area of 11.5 square miles and has a population density of 808 people per square mile. The population of Plainville is estimated at 9,293 residents. Plainville has education levels comparable to that of the Commonwealth with slightly higher than average household incomes (wages of jobs offered in Plainville itself are lower than average, but most residents commute to work). One quarter of Plainville's residents over the age of 25 have a Bachelor's degree, and one quarter have a high school diploma. Just over half of residents hold an Associate, Bachelor's, graduate, or professional degree. While education levels are on par with that of the Commonwealth, the wages and English-language proficiency of Plainville residents are higher than the Commonwealth average.

As a geographically small and relatively sparsely populated town, Plainville is highly integrated with other communities in the region. Just under 10 percent of Plainville residents work where they live, with most commuting to jobs in Greater Boston, the southeast, or Rhode Island. The primary industries that drive employment in Plainville are retail trade, accommodations and food services, construction, and manufacturing. In terms of its tax base, commercial and residential properties are the predominant sources of the town of Plainville's revenue.

Plainridge Park Casino was built on the site of an existing harness racing track which continues to be operational. On February 28, 2014, Plainridge Park Casino made history as Massachusetts's very first casino licensure, and remains the commonwealth's only slots-parlor casino. While a parking structure and slots parlor were added to the facility, it is unique among Massachusetts' casinos for being a gambling property prior to the legalization of casino gambling in Massachusetts. Plainridge Park Casino opened as a slots-parlor casino on June 24, 2015. Its location is relatively far from Plainville's town center, near the junction of Massachusetts Route 1 and Interstate 495, and the facility itself is set relatively far back from the road. Most of Plainridge Park Casino's immediate neighbors are large chain retail establishments which might benefit from the proximity to the Interstate. As such, the development of Plainridge Park Casino has had a relatively minor impact on the built environment of Plainville itself.

Plainville and its surrounding communities have been the site of a series of major consumer attractions, including Gillette Stadium in Foxborough, the XFINITY Center in Mansfield, and the Wrentham Outlets in Wrentham, which may benefit from the relative proximity of the region to Boston, Providence, and Worcester, New England's three largest cities. Of these attractions, Plainridge Park Casino is the most recent, and should to some extent be understood as part of a larger pattern of development in the region.

Analyzing CoStar data for Plainville and its neighbors is particularly challenging due to the relatively small number of commercial properties in these areas. Many of the communities in the area are primarily residential in character and have few major commercial developments. Given the small number of properties, any issue with CoStar’s data collection methods is more likely to be amplified. Moreover, small changes to the occupancy status or lease rate of certain commercial structures can lead to relatively large changes in community-wide vacancy rates and average lease rates. As a result, we take a somewhat more cautious approach in commenting on developments in this market.



Plainville’s designated surrounding communities, per the Massachusetts Gaming Commission are Attleboro, Foxborough, Mansfield, North Attleborough, and Wrentham. All of Plainville’s surrounding communities, with the possible exception of Attleboro, share a similar character to Plainville, being comprised primarily of single-family residential neighborhoods, with some small businesses downtown and some larger chain retail and small industrial sites located along major routes. The exception to this is the number of large consumer attractions noted above, many of which are located close to I-495. Attleboro, to the south, is the most populous of Plainville’s surrounding communities, and is the only designated Gateway City in the area.

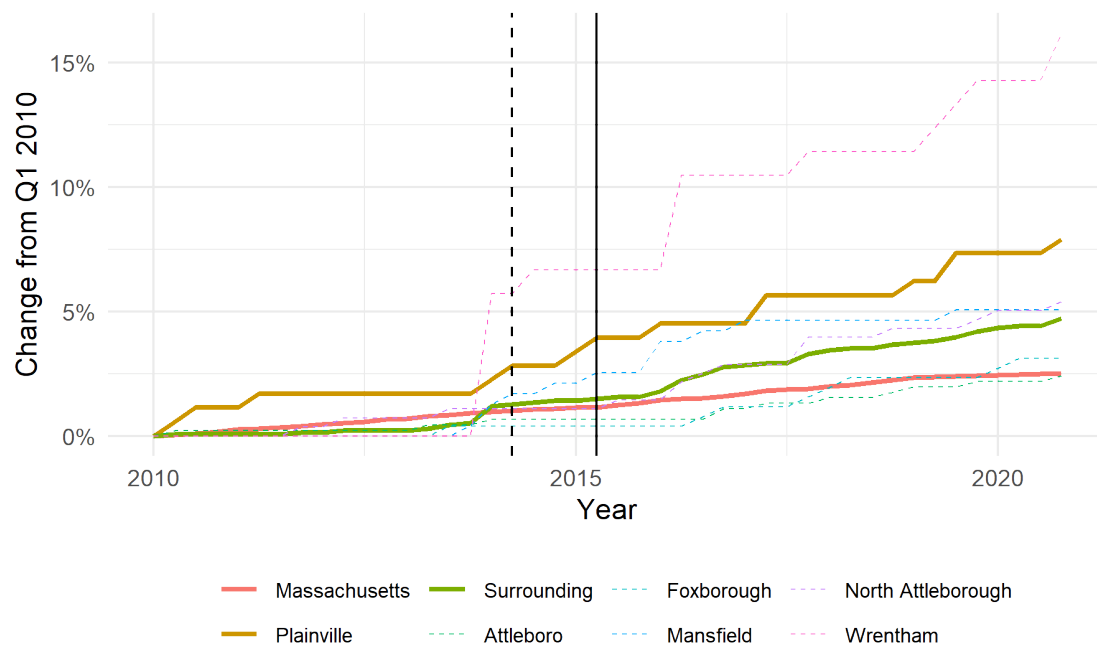
Inventory

Findings

- Plainville’s commercial building inventory grew 8 percent since 2010, a rate that outpaced its surrounding communities throughout that period.

- While commercial building square footage in surrounding communities grew at a similar rate to that of the State, Plainville's growth rate suggests that the commercial buildings being erected in Plainville were larger on average than those being built across the state or its surrounding communities.

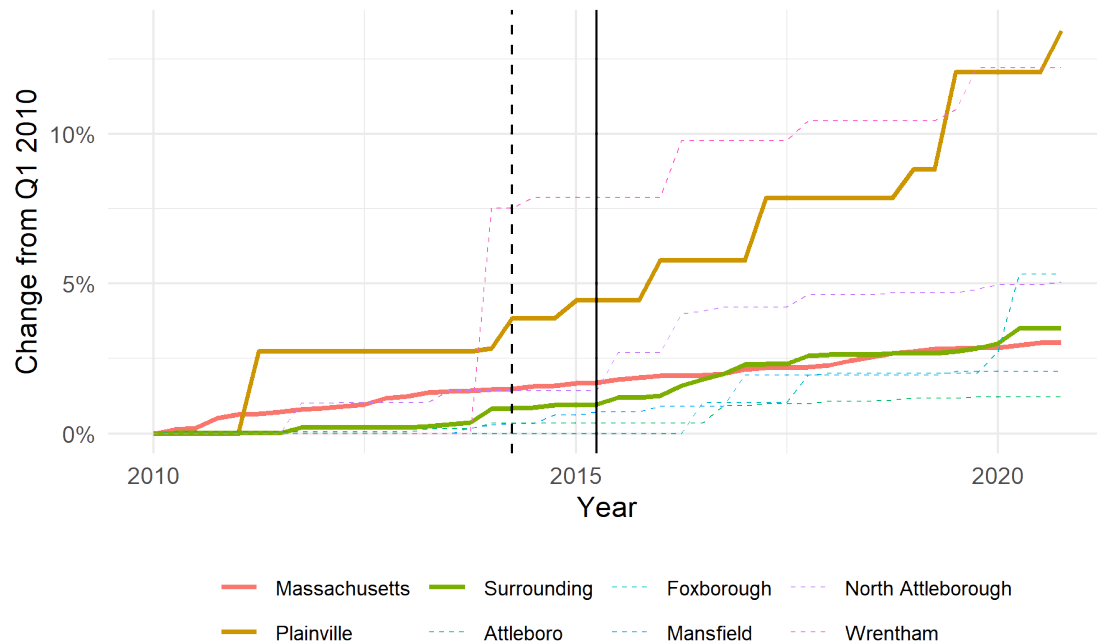
Figure 17: Change in Commercial Building Inventory, Plainville and Surrounding Communities, Q1 2010 - Q4



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Since 2010, growth in commercial building inventory in Plainville has outpaced that of the Commonwealth, growing by about 8 percent. The surrounding communities initially grew slower than the Commonwealth overall, but soon outpaced it after the Plainridge Park Casino was awarded its license. These indicators, along with the trends in many individual surrounding communities, are relatively constant over the course of the study period.

Figure 18: Change in Commercial Building Square Footage, Plainville and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

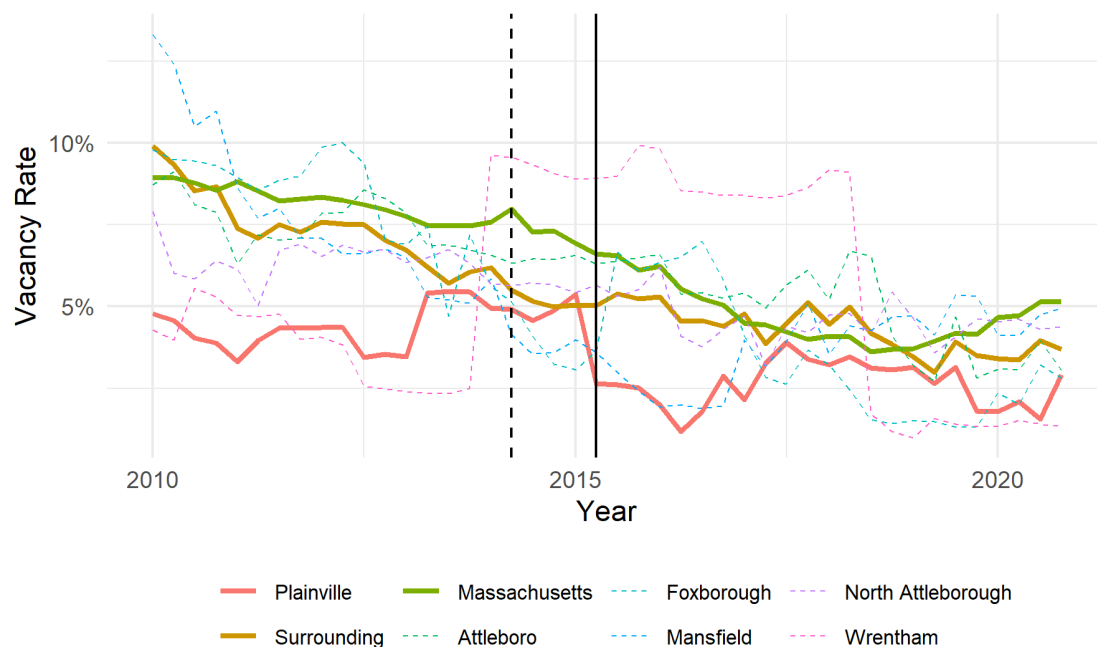
When expressed in terms of square footage, Plainville's commercial real estate inventory still outpaces that of the Commonwealth or the surrounding communities. The rate of growth for commercial square footage is also much greater than the rate of growth in commercial buildings in Plainville. This suggests that the buildings being constructed in Plainville are larger on average than the pre-existing building inventory in Plainville. Plainville's commercial real estate square footage grew by 13.5 percent from 2010 to 2020, compared to just three percent for both the Commonwealth and the surrounding communities.

Vacancy

Findings

- Plainville's commercial vacancy rate has decreased with some volatility since 2010. The volatility is likely due to the Plainville's smaller building inventory relative to its surrounding communities with less volatile vacancy rates.
- Declining vacancy rates in Plainville fit in with a broader statewide and regional trend of declining vacancy rates over the course of the study period.

Figure 19: Commercial Vacancy Rate, Plainville and Surrounding Communities, Q1 2010 - Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

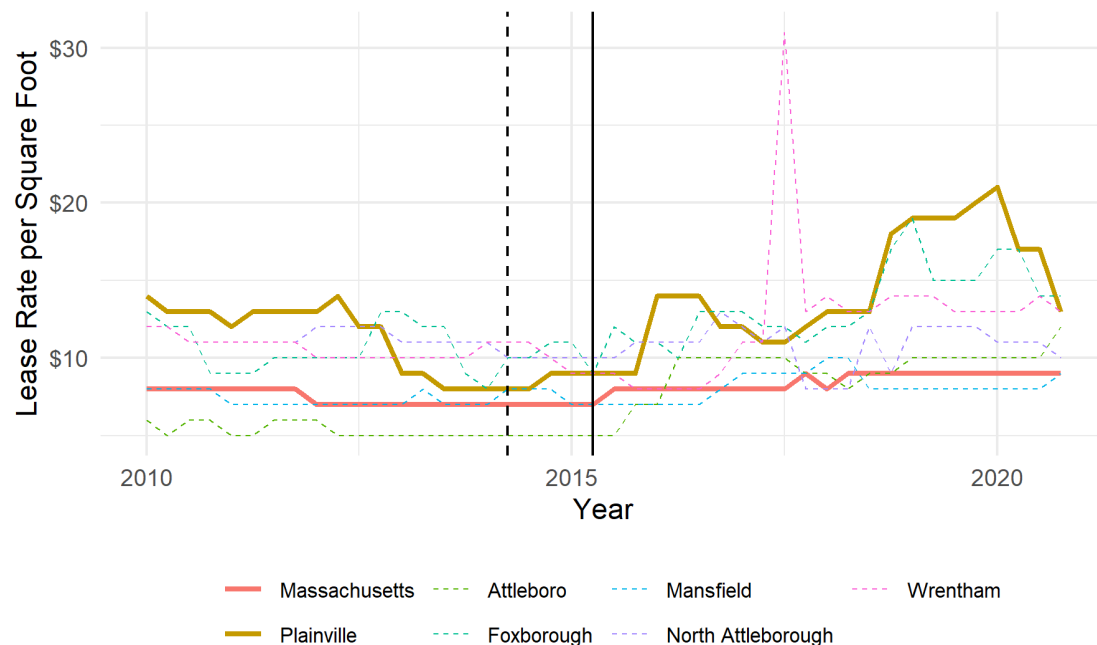
Commercial vacancy in Plainville has consistently remained below that of the Commonwealth and the surrounding communities, despite being more volatile, and vacancy rates in all three areas have trended downward since 2010. While the steep drop in commercial vacancy immediately before and after the opening of Plainridge Park Casino may have been related to the opening of the casino itself, this drop accompanies an already downward trend in vacancy rates in the surrounding area and the Commonwealth.

Lease Rates

Findings

- Plainville's commercial real estate market saw a 7.1 percent decrease in lease rates since 2010 after adjusting for inflation, though it was one of only two communities in the area with a decrease in lease rates over the time period.
- Lease rates in Plainville and the surrounding communities were volatile over the ten-year period and showed no clear trend. Some of this volatility is likely the result of data issues which confound analysis in geographies with a relatively small number of commercial buildings.

Figure 20: All Service Type Lease Rates, Plainville and Surrounding Communities, Q1 2010 – Q4 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Lease rates across all service types showed no clear trend in Plainville or its surrounding communities. This may have something to do with the relatively small number of commercial buildings in Plainville, when compared to the host communities of the other two casinos. Since 2010, lease rates in Plainville and the surrounding communities have remained above the Commonwealth average despite experiencing some volatility.

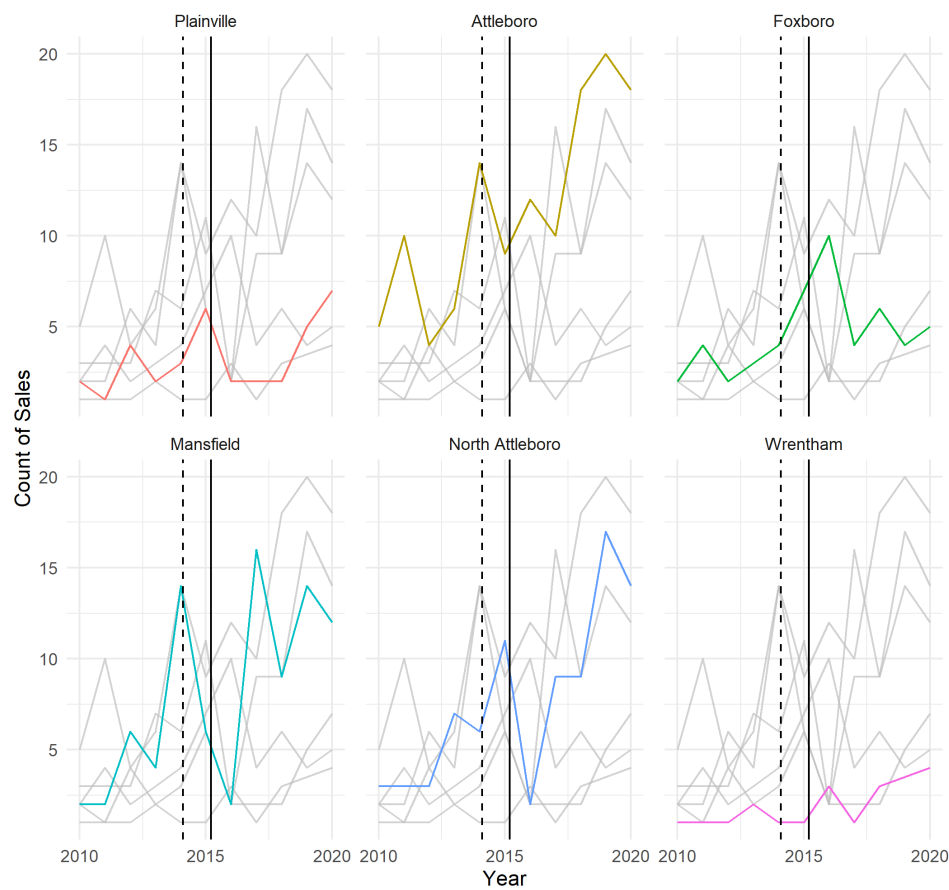
Sales of Commercial Properties

Findings

- Annual sales of commercial properties in Plainville rose after Plainridge Park Casino was awarded its license, only to fall subsequent to its opening. This variability among sales in Plainville is present in the surrounding communities as well, suggesting that it is not likely the casino's opening that effected commercial sales in the area.
- Commercial sale price-per-square-foot in Plainville was relatively unchanged over the ten-year period, with the exception of the sale of Plainridge Park Casino's real estate assets to Gaming and Leisure Properties.
- The correlation between sale price-per-square-foot and distance to Plainridge Park Casino was extremely volatile and showed no clear trend over the ten-year period, meaning there was no

consistent relationship between sale price-per-square-foot and geographic proximity to Plainridge Park Casino.

Figure 21: Sales of Commercial Properties, Plainville and Surrounding Communities, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Sales of commercial properties in Plainville were relatively minor from 2010 to 2020, never surpassing seven sales in a given year. While there was an increase in commercial sales between the award of the license and the opening of Plainridge Park Casino, the volatility, small number of sales, and lack of any long-term trend in Plainville itself, make it difficult to determine whether Plainridge Park Casino had any effect on commercial property sales. No sales data was available for Foxborough or Mansfield.

Figure 22: Commercial Sales surrounding MGM Springfield, 2010-2020

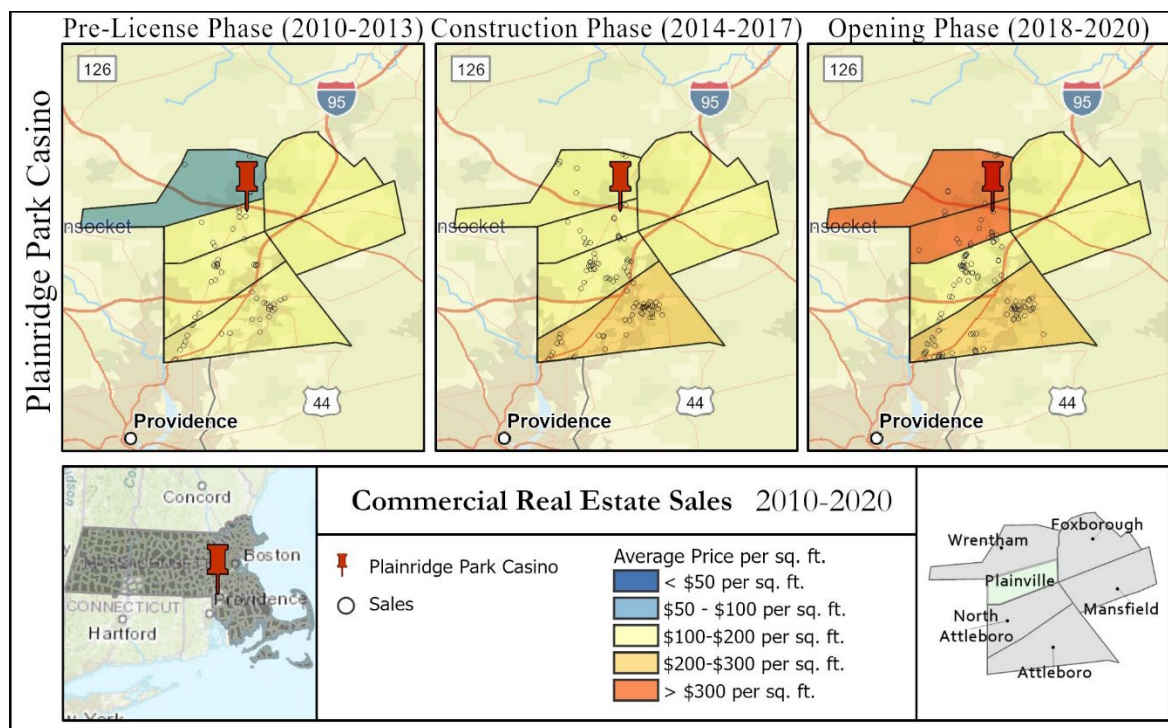
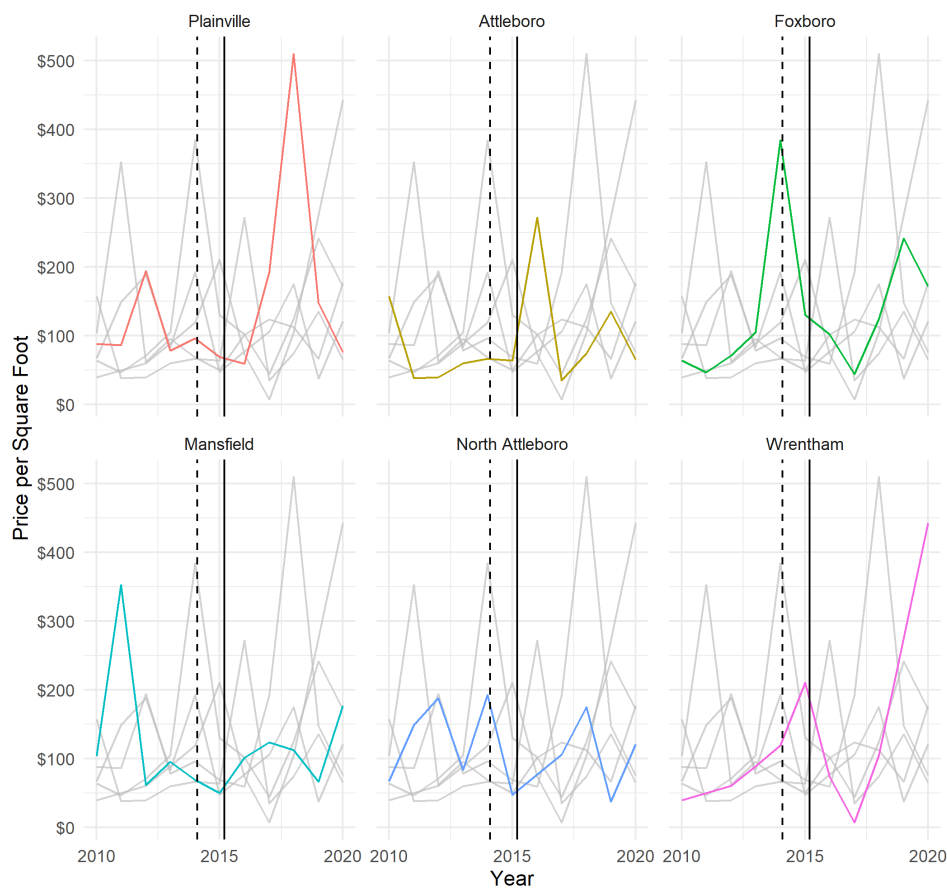


Figure 29 above shows snapshots of commercial real estate sales in Plainville and surrounding communities at key intervals throughout the casino development process. Unlike Encore Boston Harbor and MGM Springfield, the site where Plainridge Park Casino has been operating in Plainville as a harness racing track since 1999. The number of sales in the region nearly doubled from the 2010-2013 timeframe to 2014-2017. Sales in the Plainville area typically sold between \$50 and \$100 per square foot, no matter the location.

Figure 23: Commercial Sale Price-Per-Square-Foot, Plainville and Surrounding Communities, 2010 - 2020

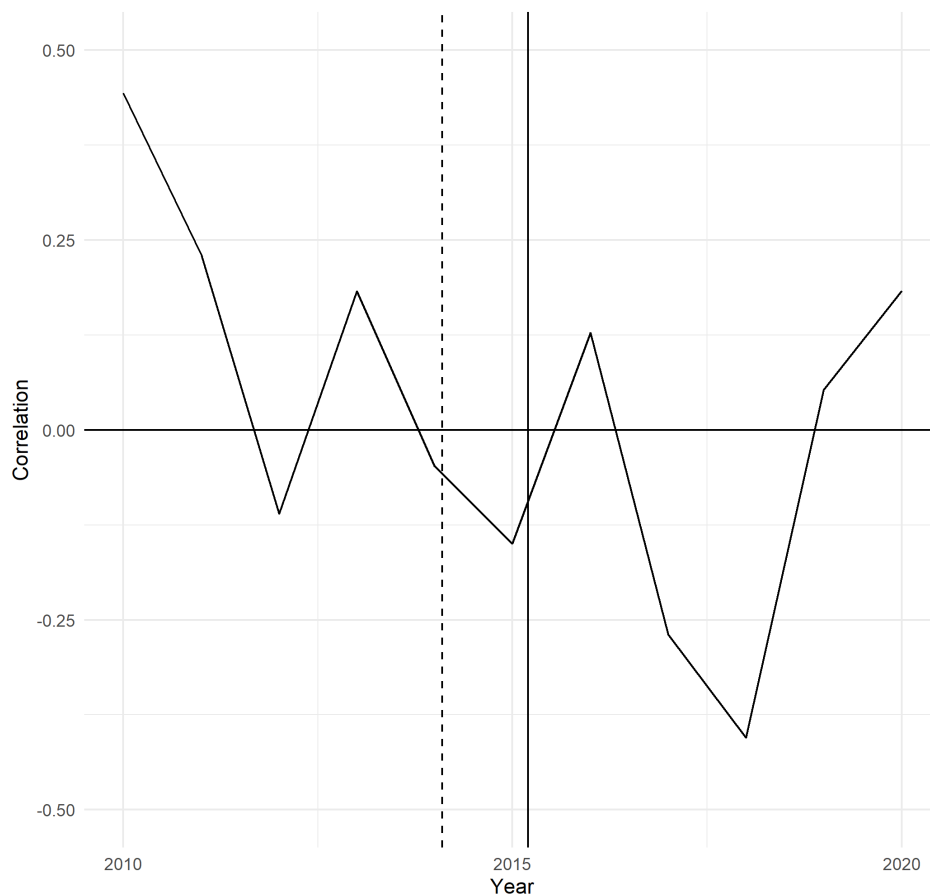


*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

Commercial sale prices in Plainville briefly spiked several years after the opening of Plainridge Park Casino, but then rapidly fell. This spike in 2018 is due to Penn National selling their real estate assets at Plainridge Park Casino to Gaming and Leisure Properties for \$250,000,000.⁶ It is important to note that because of this transaction, the original purchase of Plainridge Park Casino by Penn National is not reflected in this data, as the price-per-square-foot calculation is based on the last sale price of the property.

⁶ <https://www.globenewswire.com/news-release/2018/10/15/1621196/0/en/Gaming-and-Leisure-Properties-Inc-Announces-Completion-of-Acquisitions-and-Lease-Modifications-to-Accommodate-the-Acquisition-of-Pinnacle-Entertainment-Inc-by-Penn-National-Gaming-.html>

Figure 24: Correlation between Sale Price-Per-Square-Foot and Distance to Plainridge Park Casino, 2010 - 2020



*Note: The dashed line denotes the awarding of a license to operate a casino.
The solid line denotes the opening of the casino.*

The SEIGMA team analyzed how the statistical relationship between sales price-per-square-foot and proximity to the casino changed over time. If the construction of Plainridge Park Casino did indeed have an effect on commercial sale prices in its vicinity, we would expect to see a decline in the correlation between sale price and distance to the casino. A negative correlation would indicate that properties purchased near the casino are being sold for higher prices than those purchased further away from the casino. As the above figure shows, there is no clear relationship between commercial sale price and distance to the casino. Over the course of 2010 to 2020, the correlation between sale price and distance to the casino fluctuated widely. Given the volatility of the trend, it is difficult to discern whether the construction of Plainridge Park Casino had any bearing on commercial sale prices in the area, although in at least one year the correlation may have been driven by a substantial real estate deal at Plainridge Park Casino. This interpretation is reinforced by the relatively remote location of Plainridge Park Casino.

Conclusion

Overall, the SEIGMA team did not find strong evidence that the presence of Massachusetts' three casinos had dramatically changed the dynamics of the local or regional commercial real estate markets. While real estate conditions have changed in all three host communities and the surrounding communities, none of these changes diverge from broader trends in a way that would suggest that the casinos have fundamentally transformed those markets. The SEIGMA team does not see these findings as surprising. While the casinos have important effects on the local economy as sources of employment, intermediate demand, and tax revenue, they are individual properties in large and evolving regional real estate markets.

While the exact impact of the casinos on the commercial real estate markets is difficult to determine, it can at least be stated that the casinos do not appear to have weakened demand for commercial real estate in the host communities. Trends in terms of rising inventory, lease rates, sales prices, and falling vacancy rates continued in each of the host communities up until the start of the COVID-19 pandemic. A sudden increase in vacancy rates, or a decrease in sales, especially sales directly around the casino, could be a sign that the property was not seen by other commercial actors as a desirable neighbor, but there does not appear to be any evidence that this occurred.

If any host community could claim that the introduction of the casino has substantially changed their economic conditions, it would be Springfield. The downtown location of the casino puts it in close proximity with many of Springfield's largest commercial real estate properties, and it could plausibly be suggested that the location of the casino might affect investment decisions in the area. Springfield has also seen increases in inventory, lease rates, number of sales, and sales prices over the last decade. One factor that complicates this analysis is Springfield's status as a major employment center and the largest city in Western Massachusetts. As the United States recovered from the effects of the Great Recession, investment was always going to flow faster to communities which already had a certain level of economic activity (for an example in another region, see Boston and Cambridge's real estate activity in the Encore Boston Harbor section of the report). So while it is plausible that the casino played some role in what appears to be a rise in demand for real estate in Springfield, it is difficult to quantify the magnitude of that role.

To the extent that these findings contrast with pre-casino speculation, part of the answer may be found in the evolving nature of the casino market. Casinos are often thought of as a major tourist attraction, especially in the 20th Century when very few U.S. states allowed for their operation. Previous patron surveys conducted at Plainridge Park Casino and MGM Springfield suggest a largely local and regional patron base, with most people commuting to and from the casino in a single day.⁷ While these casinos continue to serve important economic purposes, including the recapture of spending by Massachusetts residents who would otherwise have gambled out of state, these patrons do not require the same sorts of services as patrons visiting a tourist destination for a multi-day trip, which might limit the casinos'

⁷ For more on SEIGMA's previous patron survey and economic impact reports, see <https://www.umass.edu/seigma/reports>

impact as a catalyst for attracting new visitors. It may also be the case that other jurisdictions which have only recently legalized gambling may be facing a similar landscape – with similar limitations.

More broadly, the lack of major findings may be indicative of the limitations of any single project, regardless of size, to fundamentally transform or revitalize large, complex real estate markets. For a project to do so, it would have to change the way that consumers and investors perceived an area in such a way that new real estate was developed or existing real estate was utilized in a different way. The relative geographic isolation of two of the three casinos may make that sort of development less likely, but it is not impossible that there may be further developments in time. CoStar data is generally used by real estate professionals rather than social scientists, but a broader review of how markets have responded to other major real estate findings may help to contextualize these findings.

Glossary of Terms

Commercial Building Inventory

This measure, like all of the data in this report, is generated from the CoStar database of commercial real estate. It includes most of the property types in CoStar's database, such as office, retail, flex, industrial, health care, and sports and recreation. Residential uses such as apartment buildings and student dormitories, as well as land, were excluded from the analysis.

Square footage (rentable building area)

Anywhere in this report where something is measured in terms of square footage, that refers specifically to rentable building area. According to CoStar "this area includes the usable area and its associated share of the common areas. Typically rents are based on this area. It is the space the tenant will occupy in addition to the associated common areas of the building such as the lobby, hallways, bathrooms, equipment rooms, etc."⁸

Vacancy

Vacancy, for our purposes in this report, is the share of vacant RBA (rentable building area) in a given geography divided by the share of total RBA. Because we calculate vacancy based on RBA, larger vacant spaces contribute more to a vacancy rate than smaller vacant spaces. CoStar calculates vacancy rates based on property listings data, so these vacancy rates do not include properties which have been entirely abandoned or condemned. As such, in some communities, the true vacancy rate might be substantially higher.

All service type lease rates

This is the average monthly lease rate per square foot across all service types.

Building sales

Data on building sales was also generated from CoStar. CoStar maintains a database of commercial buildings that includes fields for the last sale date and last sale price, which were used as the basis for this present analysis. Because these data only have the last sales date, if a building was sold two or more times during the study period, earlier sales would not be reflected in the data. However, given that the window for this study is ten years (Q1 2010 to Q4 2020) and given that the purchase of these sorts of buildings is a fairly major undertaking, the SEIGMA team determined that the number of buildings excluded from the data set due to this problem would be relatively small.

Correlation between Sale Price and Distance to Casino

Using CoStar's transaction-level sales data, we calculated the distance from each property that was sold from 2010 to 2020 in a host or surrounding community to the nearest casino. We then correlated the distance measure with sales price on yearly basis to investigate whether or not there was a trend in the relationship between sales price and distance from the nearest casino.

⁸ CoStar provides a glossary of terms of their own at https://www.costar.com/about/costar-glossary#go_r

Further Reading

The University of Massachusetts Amherst School of Public Health & Health Sciences (SPHHS) has been engaged by the Massachusetts Gaming Commission (MGC) to carry out a comprehensive, multi-year research project, believed to be the first of its kind, on the economic and social impacts of introducing casino gambling in Massachusetts. The Umass Donahue Institute leads the economic and fiscal impact research, producing reports on a regular basis on a variety of related topics. Publications that are particularly relevant to Real Estate include:

- Real Estate Reports
 - Real Estate Profiles of Host Communities
 - [Everett Real Estate Profile](#)
 - [Plainville Real Estate Profile](#)
 - [Springfield Real Estate Profile](#)
 - Real Estate Impacts of MGM Springfield in Springfield and Surrounding Communities
 - Real Estate Impacts of Plainridge Park Casino on Plainville and Surrounding Communities
- Construction Reports
 - The Construction of Encore Boston Harbor: Spending, Employment, and Economic Impacts
 - The Construction of MGM Springfield: Spending, Employment and Economic Impacts
 - The Construction of Plainridge Park Casino: Spending, Employment and Economic Impacts

Reports are continually being released; for future research: <https://www.umass.edu/seigma/reports>

Appendix

Appendix 1: Building Inventory and Square Footage, Everett and Surrounding Communities

	Number of Buildings, Q4 2020	Percent Change in Buildings, Q1, 2010- Q4 2020	Percent Change in Buildings, Q3, 2014- Q4 2020	Percent Change in Buildings, Q2, 2019- Q4 2020	Rentable Building Area, Q4 2020	Percent Change in Area, Q1, 2010- Q4 2020	Percent Change in Area, Q3, 2014- Q4 2020	Percent Change in Area, Q2, 2019- Q4 2020
Massachusetts	15,610	2.5%	1.4%	0.1%	271,958,779	3.1%	1.5%	0.2%
Everett	407	1.2%	1.2%	0.0%	6,707,929	2.6%	2.6%	0.0%
Surrounding Communities	9,200	2.9%	2.0%	0.4%	231,400,448	9.8%	6.6%	1.2%
Boston	5,915	2.7%	1.8%	0.4%	160,482,734	8.1%	5.2%	0.8%
Cambridge	1,238	3.4%	2.3%	0.6%	40,027,440	18.5%	12.0%	3.3%
Lynn	532	1.7%	0.9%	0.0%	6,846,222	2.5%	1.3%	0.0%
Malden	431	2.6%	1.7%	0.2%	6,600,177	2.4%	1.8%	0.7%
Medford	352	2.6%	2.0%	0.6%	6,254,377	8.1%	7.9%	1.9%
Melrose	138	1.5%	1.5%	0.7%	1,076,460	1.2%	1.2%	1.2%
Somerville	594	4.9%	3.8%	0.2%	10,113,038	19.5%	15.5%	0.1%

Appendix 2: Vacancy Rates in Everett and Surrounding Communities

	Vacancy, Q4 2020	Change in Vacancy Rate, Q1 2010 - Q4 2020	Change in Vacancy Rate, Q3 2014 - Q4 2020	Change in Vacancy Rate, Q2 2019 - Q4 2020
Massachusetts	5.1%	-3.8%	-2.1%	1.2%
Everett	2.4%	-1.1%	0.4%	-0.5%
Surrounding Communities	6.3%	-2.4%	-0.4%	2.0%
Boston	7.0%	-2.1%	0.1%	2.1%
Cambridge	3.7%	-4.1%	-3.4%	1.5%
Lynn	6.3%	-4.6%	1.7%	4.5%
Malden	7.5%	0.7%	1.3%	1.4%
Medford	5.8%	0.3%	0.6%	1.1%
Melrose	0.2%	-6.1%	-4.6%	-1.3%
Somerville	5.0%	-2.7%	0.3%	2.0%

Appendix 3: All Service Type Lease Rates in Everett and Surrounding Communities

	All service Type Lease Rates			
	Q4 2020 Rate per Square Foot	Percent Change, Q1 2010- Q4 2020	Percent Change, Q3 2014- Q4 2020	Percent Change Q2 2019- Q4 2020
Massachusetts	\$8.93	6.9%	21.0%	-0.5%
Everett	\$15.93	58.5%	52.7%	-0.8%
Boston	\$28.69	17.4%	20.7%	0.6%
Cambridge	\$47.52	33.1%	6.6%	-4.1%
Lynn	\$16.43	46.0%	55.1%	28.9%
Malden	\$17.58	2.2%	4.3%	8.6%
Medford	\$18.29	9.0%	11.4%	-15.6%
Melrose	\$24.38	82.9%	92.4%	7.4%
Somerville	\$31.09	82.0%	50.8%	13.2%

Appendix 4: Building Inventory and Square Footage, Springfield and Surrounding Communities

		Percent Change in	Percent Change in	Percent Change in		Percent Change in	Percent Change in	Percent Change in
	Number of Buildings, Q4 2020	Buildings, Q1, 2010- Q4 2020	Buildings, Q2, 2014- Q4 2020	Buildings, Q3, 2018- Q4 2020	Rentable Building Area, Q4 2020	Area, Q1, 2010- Q4 2020	Area, Q2, 2014- Q4 2020	Area, Q3, 2018- Q4 2020
Massachusetts	15,610	2.50%	1.50%	0.40%	271,958,779	3.10%	1.50%	0.50%
Springfield	1,416	3.30%	2.20%	0.40%	26,192,656	5.20%	3.40%	1.80%
Surrounding Communities	2,636	2.20%	1.40%	0.30%	46,031,410	0.90%	0.60%	0%
Agawam	315	2.90%	1.90%	0.30%	435,469	0.90%	0.50%	0.10%
Chicopee	685	1.50%	0.60%	0.30%	12,612,696	0.70%	0.30%	0%
East Longmeadow	153	4.10%	2.70%	1.30%	4,709,704	0.60%	0.50%	0.10%
Holyoke	758	1.50%	1.10%	0%	16,824,360	0.60%	0.40%	0%
Longmeadow	38	5.60%	5.60%	0%	597,658	11.80%	11.80%	0%
Ludlow	126	5%	2.40%	1.60%	1,546,186	2%	0.80%	0.40%
West Springfield	469	2.60%	2%	0.20%	7,641,778	1.30%	0.90%	0%
Wilbraham	92	1.10%	0%	0%	1,663,559	0%	0%	0%

Appendix 5: Vacancy Rates in Springfield and Surrounding Communities

	Vacancy, Q4 2020	Change in Vacancy Rate, Q1 2010 - Q4 2020	Change in Vacancy Rate, Q2 2014 - Q4 2020	Change in Vacancy Rate, Q3 2018 - Q4 2020
Massachusetts	5.1%	-3.8%	-2.8%	1.5%
Springfield	4.3%	-5.8%	-5.7%	0.6%
Surrounding Communities	6.7%	-3.3%	-1.0%	2.4%
Agawam	10.6%	-7.3%	-0.4%	3.1%
Chicopee	3.1%	-7.0%	-5.5%	1.5%
East Longmeadow	14.2%	-1.3%	0.5%	2.1%
Holyoke	7.9%	0.2%	1.1%	4.3%
Longmeadow	8.1%	-2.3%	6.3%	4.2%
Ludlow	3.2%	-3.0%	0.9%	0.8%
West Springfield	6.8%	-4.5%	0.4%	0.9%
Wilbraham	0.8%	-10.7%	-3.9%	-0.6%

Appendix 6: Lease Rates in Springfield and Surrounding Communities, All Property Types

	All Service Type Lease Rates			
	Q4 2020 Rate per Square Foot	Percent Change, Q1 2010- Q4 2020	Percent Change, Q2 2014- Q4 2020	Percent Change, Q3 2018- Q4 2020
Massachusetts	\$8.93	6.9%	22.8%	0.4%
Springfield	\$10.68	17.3%	29.7%	-6.0%
Agawam ¹	N/A	N/A	N/A	N/A
Chicopee	\$6.51	8.2%	-8.1%	6.1%
East Longmeadow	\$4.13	1.4%	27.6%	9.5%
Holyoke	\$5.98	-15.6%	-27.2%	-30.1%
Longmeadow	\$21.78	-8.5%	-2.1%	-25.4%
Ludlow	\$16.89	67.8%	99.6%	44.0%
West Springfield	\$12.55	26.2%	54.1%	4.4%
Wilbraham	\$10.34	-32.1%	-27.1%	-36.7%

¹data not available

Appendix 7: Building Inventory and Square Footage, Plainville and Surrounding Communities

	Number of Buildings, Q4 2020	Percent Change in Buildings, Q1, 2010- Q4 2020	Percent Change in Buildings, Q1, 2014- Q4 2020	Percent Change in Buildings, Q2, 2015- Q4 2020	Rentable Building Area, Q4 2020	Percent Change in Area, Q1, 2010- Q4 2020	Percent Change in Area, Q1, 2014- Q4 2020	Percent Change in Area, Q2, 2015- Q4 2020
Massachusetts	15,610	2.50%	1.50%	1.40%	271,958,779	3.10%	1.60%	1.30%
Plainville	191	7.90%	5.50%	3.80%	2,125,141	13.50%	10.30%	8.60%
Surrounding Communities	1,397	4.70%	3.50%	3.20%	30,772,678	3.50%	2.70%	3%
Attleboro	468	2.40%	1.70%	1.70%	8,358,069	1.20%	0.90%	0.90%
Foxborough	265	3.10%	2.70%	2.70%	6,145,227	5.30%	5.30%	5%
Mansfield	249	5.10%	3.80%	2.50%	8,877,554	2.10%	1.80%	1.30%
North Attleborough	293	5.40%	4.30%	4%	5,701,002	5.10%	3.60%	4%
Wrentham	122	16.20%	9.90%	9%	1,690,826	12.20%	4.40%	4%

Appendix 8: Vacancy Rates in Plainville and Surrounding Communities

	Change in Vacancy Rate, Q1 Vacancy, 2010 - Q4 Q4 2020	Change in Vacancy Rate, Q1 2014 - Q4 2020	Change in Vacancy Rate, Q2 2015 - Q4 2020
Massachusetts	5.1%	-3.8%	-2.5%
Plainville	2.9%	-1.9%	-2.0%
Surrounding Communities	3.7%	-6.2%	-2.5%
Attleboro	3.0%	-5.7%	-3.5%
Foxborough	2.8%	-7.0%	-2.8%
Mansfield	4.9%	-8.4%	-0.9%
North Attleborough	4.4%	-3.5%	-1.3%
Wrentham	1.3%	-2.9%	-8.3%

Appendix 9: Lease Rates in Plainville and Surrounding Communities, All Property Types

	All Service Type Lease Rates			
	Q4 2020 Rate per Square Foot	Percent Change, Q1 2010- Q4 2020	Percent Change, Q1 2014- Q4 2020	Percent Change, Q2 2015- Q4 2020
Massachusetts	\$8.93	6.9%	23.9%	21.0%
Plainville	\$12.83	-7.1%	52.4%	44.0%
Attleboro	\$12.19	97.5%	128.9%	156.6%
Foxborough	\$14.09	12.2%	74.1%	60.7%
Mansfield	\$8.54	13.1%	27.6%	20.3%
North Attleborough	\$9.99	-14.6%	-4.9%	0.8%
Wrentham	\$13.27	8.8%	23.0%	48.9%