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SOCIAL AND ECONOMIC IMPACTS OF GAMBLING IN MASSACHUSETTS

UNIVERSITY OF MASSACHUSETTS SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES

Baseline Real Estate Conditions

Host Community Profile: Everett

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Baseline Real Estate Conditions, Everett

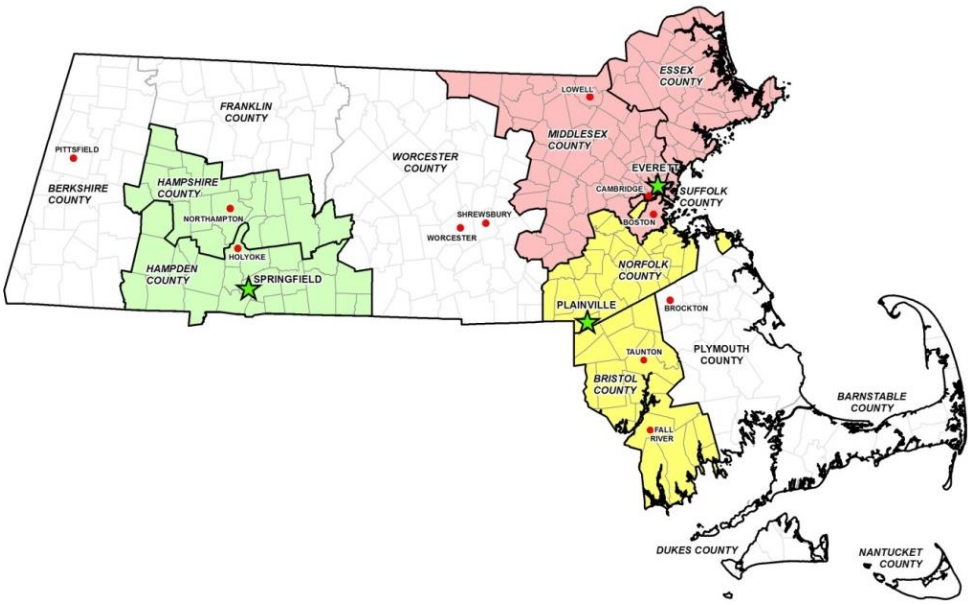
This report, produced by Dr. Henry Renski of the UMASS Amherst Center for Economic Development in conjunction with the Economic and Public Policy research group at the UMass Donahue Institute, provides a summary of recent trends in the residential, commercial and industrial real estate markets for the City of Everett and its surrounding communities. It serves as a companion to the Everett Host Community Economic Profile report by the Donahue Institute that documents baseline conditions on a variety of economic, demographic and fiscal indicators. As with the Host Community Profile report,[i] our analysis of Real Estate conditions covers several distinct concepts to paint a comprehensive picture of the local and regional real estate market prior to the introduction of a major resort casino. The report is divided into two major sections. The first covers the residential real estate market and the second covers the commercial and industrial real estate markets.

The purpose of this report is to document recent market conditions in the area prior to the introduction of a major resort casino. Our primary goal is to establish a baseline for measuring potential development impacts. In the process, we will also evaluate different data sources as well as techniques for identifying possible impacts. When measuring the impacts of a major development, it is important to not only track trends in the host community but also to benchmark these changes against other areas with similar market conditions but unlikely to be impacted by the development itself. 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 mistakenly attribute an apparent increase or decrease in property values to the development. However, finding a suitable comparison group can be tricky. Communities with similar market conditions are often neighbors, and thus might be subject to spillover impacts. Conversely, distant communities might provide a false baseline of comparison because they are not subject to similar external market forces or regulatory conditions.

For this report, we compare historic trends in Everett to the Immediate Region (Suffolk, Essex and Middlesex Counties) and the state (Figure 1). While inclusive of Everett, both the Immediate Region and the state are much larger than the likely sphere of influence of the casino. However, they are still subject to similar influences of national business cycles and regional economic and demographic trends. Thus, the bulk of the impacts of the development are likely to be averaged-out. Still, we recognize that these are not ideal comparison groups, not that such a thing actually exists. One of the primary purposes of this baseline study is to ascertain just how well recent market trends in the state and region match the host community, and whether these can serve as a sufficient basis for comparison.

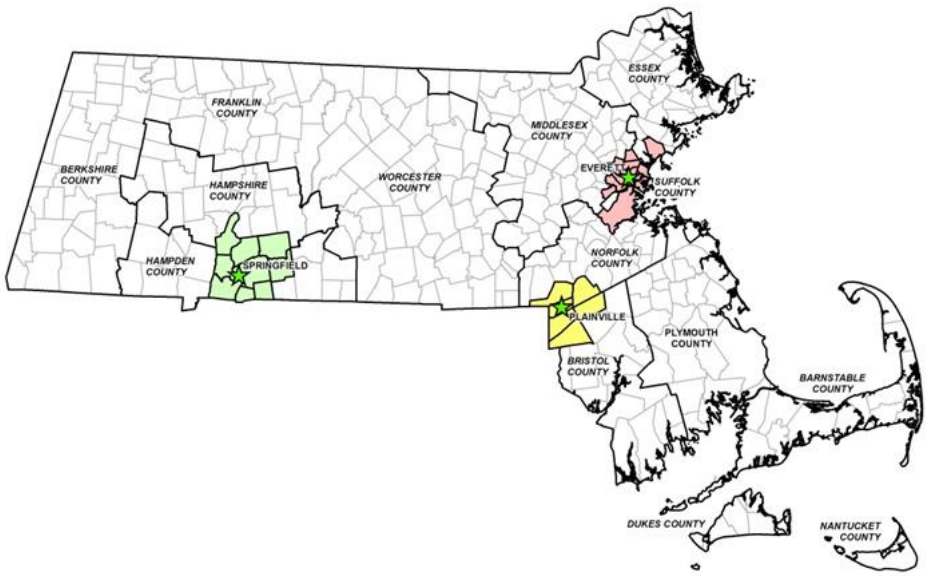
We would like to thank Catherine Rollins, Director of Policy for the City of Everett and her colleagues for reviewing this report and for providing valuable feedback about the city's real estate market.

Figure 1. Massachusetts Host Communities and Their Immediate Regions



The impact of a major resort casino may very well spill beyond the borders of its host community. Thus, in addition to the host community, we also track baseline market conditions among nearby areas designated as "official surrounding communities" by the Massachusetts Gaming Commission. There are nine such communities in the Everett region, making it impractical to report specific trends for each within the limited confines of this report. Here we provide just a brief summary of changes over the entire period.

Figure 2. Massachusetts Host and Surrounding Communities



Summary of Baseline Findings

Residential Real Estate Indicators

- Everett's residential real estate market is dominated by multi-family homes. This is in contrast to most communities in Massachusetts, where single-unit homes are more prevalent.
- Everett remains one of the most affordable areas to purchase a home in Greater Boston. It is far more affordable than Boston, Cambridge or Somerville, with prices that are roughly comparable to Chelsea, Lynn, and Revere.
- The housing market in Everett has largely recovered from the Great Recession. Since 2011, most residential use-types have seen a rise in both sales volume and price.
- Recent trends in both the pace of residential sales and rate of increase in sale prices in Everett are roughly comparable to the state and region. The major exception is for Everett condominiums, where the pace of sales and the selling price have risen much faster than both the Immediate Region and the Commonwealth.
- Sales of multi-family homes are highly concentrated in the area immediately adjacent to the proposed site of the casino. Single-family home sales are more heavily concentrated in the outlying areas of the region.
- We expect that if the casino does have an impact on sales, it will be most apparent among properties that are closest to the site. Overall, we find little relationship between proximity to the proposed casino site and changes in home prices over the baseline period. Nearby properties are more affordable, but the underlying trend of rising real estate values is not related to distance.
- According to the Census, gross monthly rents in Everett are slightly higher than the state median, but tend to be toward the low end of communities in the region. Everett is also in the low-to-middle end of its neighbors when it comes to long-term changes in median rents.
- Since 2006, rents in Everett have been either flat or growing very slowly, lagging both the state and the Immediate Region. Rental rates in Everett began to rise slightly after 2012, and have increased rapidly in 2015—exceeding the state or region.
- Building permits are an important indicator of future development, but can be highly variable. This will make it difficult to distinguish possible impacts from serendipitous events, such as the permitting of a single large development.
- The value of permits tends to be more stable than the number of permits. In Everett, the real value of single-family and multi-family permits declined for most of the study period. There has been a slight uptick in the value of multi-unit permits in Everett since 2012, but this is notably lower than state and regional trends.

Commercial and Industrial Real Estate Indicators

- While Everett contains more commercial buildings than industrial buildings, the total amount of rentable building area dedicated to industrial activities is greater than the amount dedicated to commercial activities.
- Everett's commercial and industrial vacancy rates are very low compared to those of its neighbors.
- Commercial and industrial lease rates in Everett are higher than the state average and roughly similar to those in many neighboring communities. However, they are much lower than those of some of Everett's neighbors, such as Boston or Cambridge.

Residential Real Estate

Residential Property Sales

Property sales are among the most direct indicators of changing real estate markets conditions. They are often used to measure the impact of new development on surrounding areas. A sustained rise in the number and market values of properties following the construction of a new casino may signify successful neighborhood revitalization, as investors are willing to buy properties at higher prices. Conversely, a decline in property values may indicate the negative impacts resulting from possible fears of increased, traffic, crime, noise, or other negative externalities.

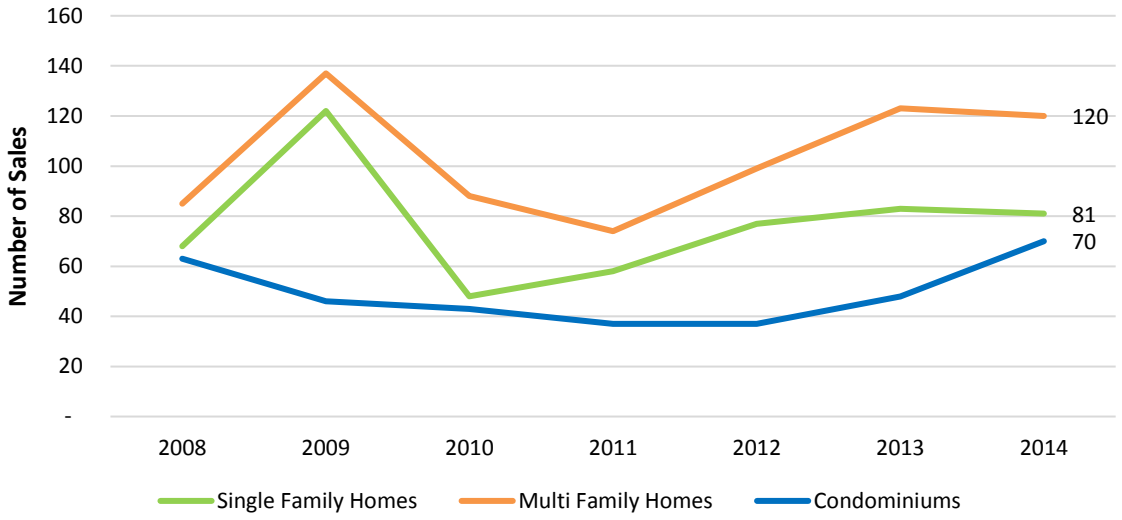
Our analysis uses property sales reported by the Massachusetts Department of Revenue (DOR) Division of Local Services. The DOR reports all verified property sales in the Commonwealth. Although the DOR database includes property sales of all types, we only include those classified as "arms-length" transactions. This eliminates sales between family members and other situations where the sales price is not a pure reflection of market value. The DOR database further identifies sales by the predominant land use classification of the property. We focus on several general types, namely: single-family residential, multi-family residential, and condominiums. We ignore other types of residential land uses, such as mobile homes and vacant lots, as they are relatively rare.

We use the DOR database to track the number and market value of property sales in Everett compared to the Immediate Region and state, starting in 2008. Individual communities report this data to the DOR on a fiscal year basis, and for some there is up to a two-year lag. At the time of writing, most communities had reported for FY 2016, covering sales up to the fourth quarter of 2014. A few holdouts remain, but we will provide an update to this report as soon the new data comes in. We also take advantage of the detailed address data in the DOR database to examine sales trends at varying distances from the site of the casino: one mile, two miles, five miles, seven miles, and ten miles.

Residential Property Sales in Everett

The Everett residential housing market is somewhat atypical, with a relatively higher portion of its housing stock in multi-family dwellings and far fewer single-family dwellings. In most communities, single-family home sales are (by far) the most common form of residential sale, followed by condominiums. In Everett, multi-family home sales regularly surpass both single-family and condominium sales (Figure 3). This is one of the reasons why it is important to distinguish different types of housing markets, rather than focusing on community-wide averages.

Figure 3: City of Everett, Number of Residential Property Sales by Type

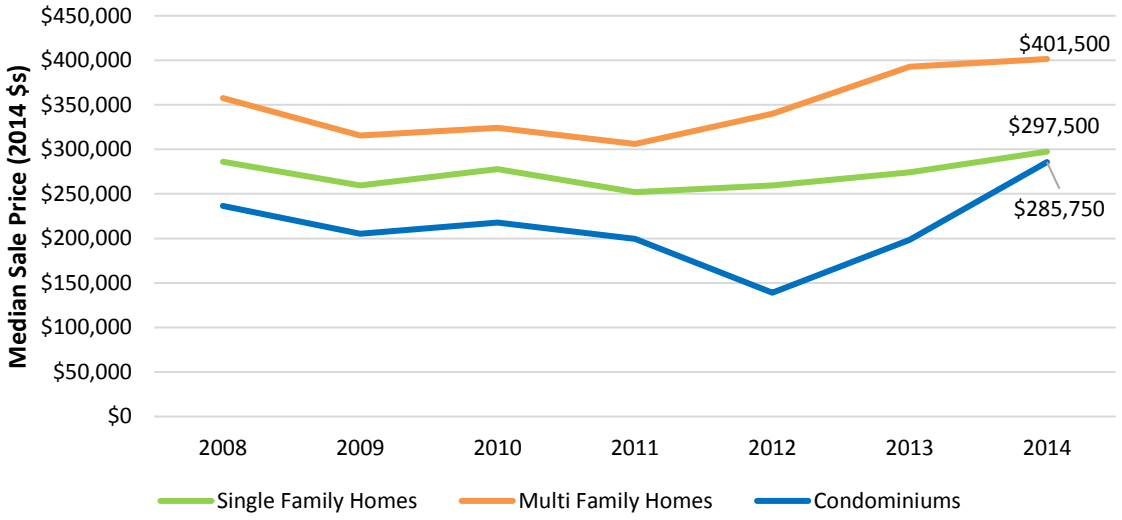


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

The Great Recession negatively affected all three housing types in Everett in 2008-09, although not to the same extent. Single-family homes sales witnessed the most profound decline, dropping from over 122 sales in 2009 to under 50 in 2010. Sales picked up starting in 2011 as the housing market recovered, although the pace of sales growth stabilized in 2014. Multi-family homes in Everett experienced a generally similar trend of decline from 2008 to 2010, but have since largely returned to pre-recessionary levels. Condominium sales have been less volatile, showing a steady increase in sales volume from 2012 to 2014.

The median sale price is relatively less affected by recent economic swings than the number of sales, per se. There was a slight decline in the real dollar sale price of single and multi-family homes from 2010 to 2011, but prices in both markets have since rebounded and now exceed pre-recessionary levels (Figure 4). In 2014, the typical single-family home in Everett sold for just under $300,000, a real dollar increase of $11,500 over 2008 values and $45,000 more than its low-point in 2011. Rising prices are even more pronounced for condominiums and multi-family properties – particularly in the past two to three years. The real median sale price of multi-family units has risen by $44,000 since 2008, while condominiums have risen by nearly $50,000. The year 2012 was a particularly low point for condominium sales in Everett, but the market has quickly recovered with the median sale price in 2014 now nearly matching the price for a single-family home in Everett.

Figure 4: City of Everett, Real Median Sales Price of Residential Properties by Type (2014 dollars)

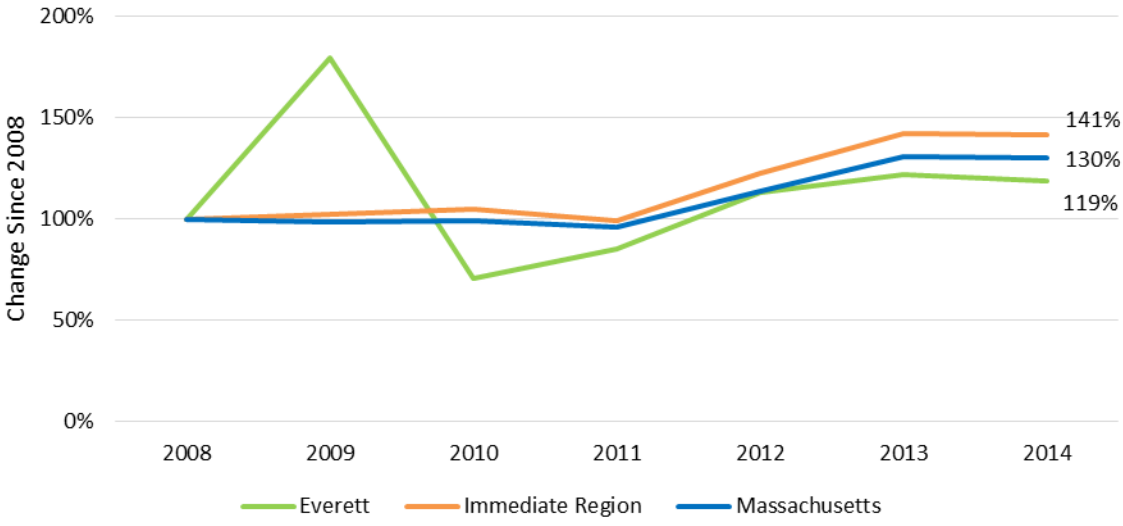


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Comparisons to the Region and State

Recent trends in Everett's housing market are generally comparable to the region and state, although the state and region tend to be less volatile.[ii] Since Everett's single-family home market is relatively small, wild swings in sales are to be expected. More specifically, 2008 was a banner year for single-family home sales in Everett with sales rising 79 percent between 2008 and 2009, but this was immediately followed by a sharp drop in 2009 (Figure 5). Sales in the region and state were essentially flat during this time. More telling is the steady increase in the single-family home sales since 2010, with the city essentially matching region and statewide trends.

Figure 5: Single-family Home Sales, Change from 2008

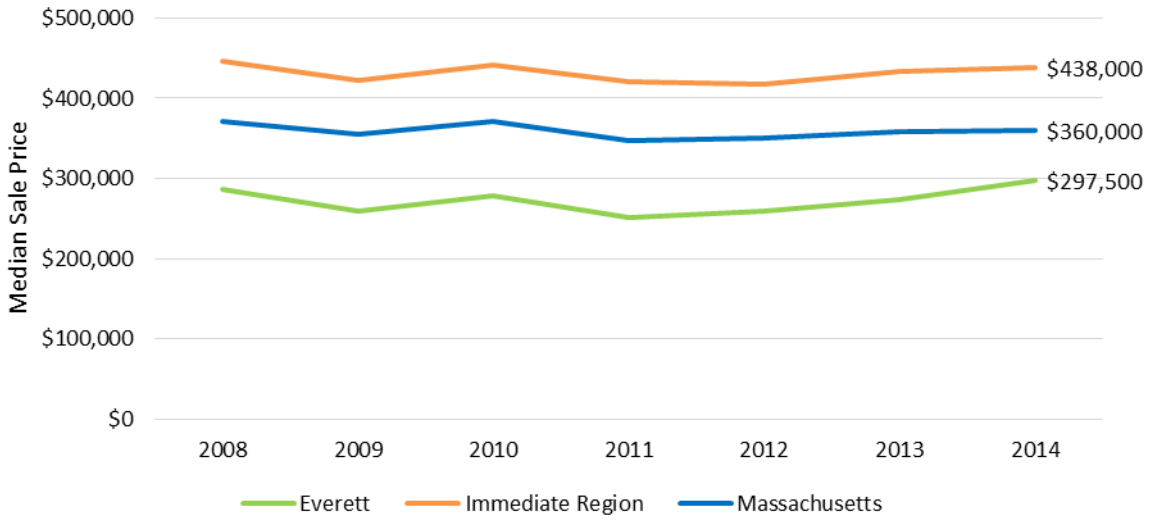


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Single-family homes are considerably more affordable in Everett compared to the region as well as to Commonwealth as a whole (Figure 6). In 2014, the typical single-family home in Everett sold for just under $300,000—nearly $60,000 less than the state and nearly $141,000 less than the regional median.

Absolute differences in the value of homes matters less in accurately measuring development impacts compared to differences in the underlying trend—i.e., have sales prices been increasing or decreasing similarly to the state and region. From this perspective, the single-family market in Everett seems much more comparable to the state and region. Differences in the median sale price of single-family homes have been remarkably steady over the recent past—the median sale price for single-family homes in Everett is typically 61 to 68 percent lower than the regional median and between 73 to 78 percent lower than the state median since 2008.

Figure 6: Single-family Homes, Median Sale Price (2014 Dollars)

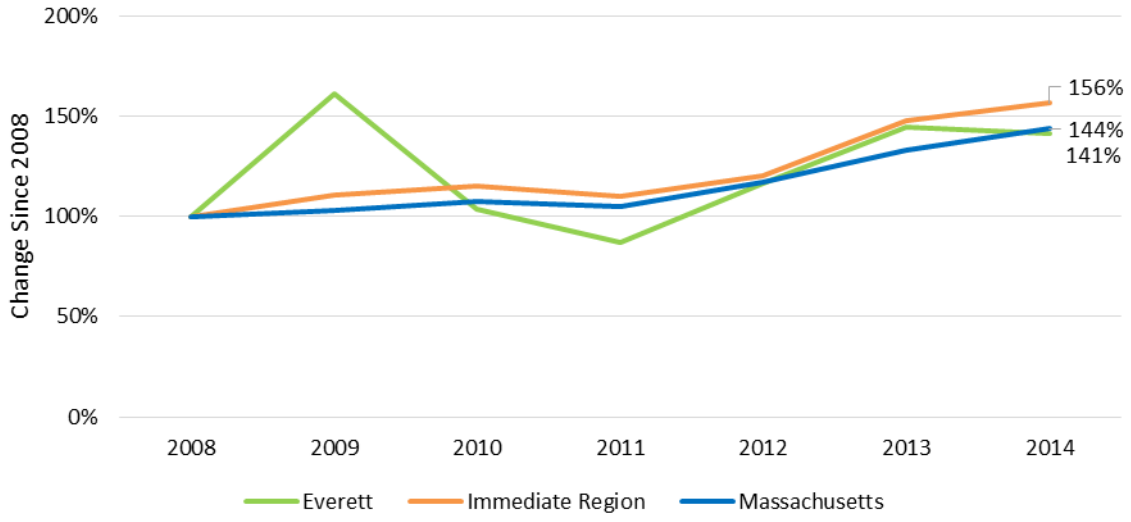


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Everett's multi-family market is a much closer match to regional and state trends in terms of sales volume (Figure 7) and price (Figure 8). As with single-family sales, 2009 was an atypically strong year for multi-family home sales in Everett, which dropped rather sharply in the following two years. Sales growth has picked up since 2011 and is now back on par with the pace of sales growth in the Immediate Region.

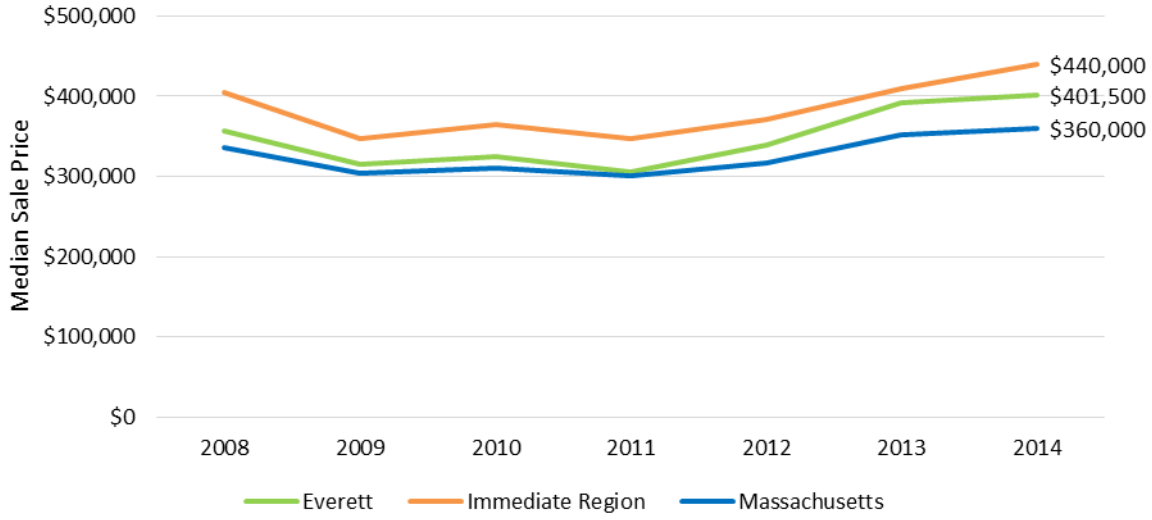
Unlike single-family homes, the market value for multi-family housing units in Everett is much closer to regional and state values. The real median sale price of multi-family housing in Everett declined slightly between 2008 and 2011. However, the price of multi-family homes in Everett has risen sharply since then, at a pace exceeding both the Commonwealth and the Immediate Region. The average sale price of multi-unit housing in Everett now exceeds the state median by roughly $40,000 and is nearly on par with the Immediate Region.

Figure 7: Change in Multi-family Home Sales, 2008 to 2013



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

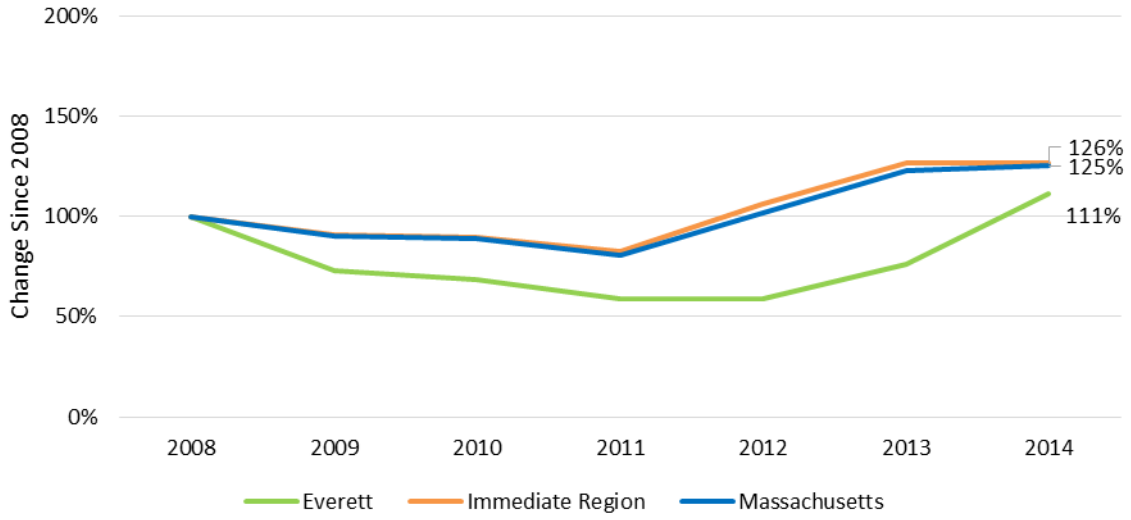
Figure 8: Multi-family Homes, Median Sale Price (2014 Dollars)



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Condominium sales in Everett have generally been slower than the state and Immediate Region. All three areas (city, Immediate Region, and state) had a declining rate of condominium sales from 2008 to 2011, with the rate of decline highest in Everett (Figure 9). After 2011, the number of condominium sales in the state and region began to grow; in Everett, sales did not pick up until after 2012.

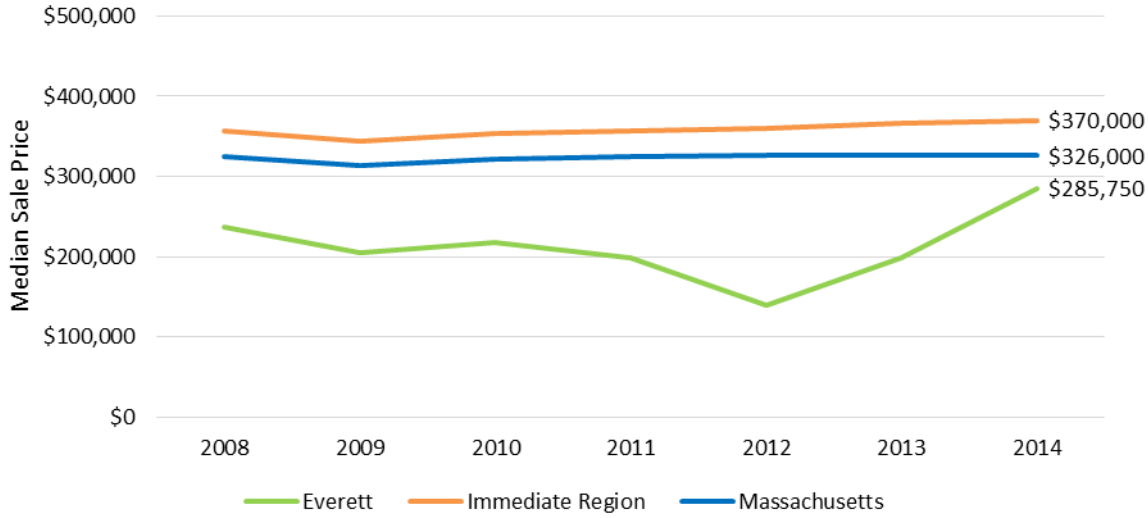
Figure 9: Change in Condominium Sales, 2008 to 2014



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Historically, the sale price of Everett condominiums were well below both state and Immediate Region. However, condominium prices in Everett have surged since 2012 and are quickly closing in on state and regional averages (Figure 10). Since 2008, condominium prices held steady for the rest of the state and region. In Everett median prices declined by almost $100,000 real dollars between 2008 and 2012. The Everett market has since rebounded with the the typical condominium selliing for just over $285,000--nearly $85,000 less than the region and $41,000 less than the state as a whole.

Figure 10: Condominiums, Median Sale Price (2014 Dollars)



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Residential Property Sales in Surrounding Communities

The surrounding communities represent very different market conditions. Real estate in Cambridge, Boston and Somerville is the most expensive (Table 1). These three urban core-communities face very different market conditions than the others. Everett, along with Chelsea, Lynn, Revere, and Malden, tend to be more affordable. Likewise, the 4 percent increase in the real median sale price of single-family homes in Everett is generally below most of the other communities. However, it is not altogether atypical: Medford, Melrose and Revere are slightly higher and Lynn and Malden saw net decline in real prices. For multi-family homes, the 12 percent rate of change in Everett's real median prices is notably lower than the 20 to 40 percent real increase typical of other area communities. The 21 percent real growth in Everett's condominium sale prices is toward the high end for the region, with only Cambridge and Somerville surpassing it.

Table 1: Residential Sales Summary, Everett and Surrounding Communities

	Single Family Homes			Multi-Family Homes			Condominiums		
Residential Sales Indicators	Sales (2014)	Median Sale Price (2014)	% Change in Real Median Sale Price 2008-2014	Sales (2014)	Median Sale Price (2014)	% Change in Real Median Sale Price 2008-2014	Sales (2014)	Median Sale Price (2014)	% Change in Real Median Sale Price 2008-2014
Massachusetts	41,453	$360,000	-3%	4,703	$360,000	7%	20,123	$326,000	0%
Everett	81	$297,500	4%	120	$401,500	12%	70	$285,750	21%
Surrounding Communities									
Boston	842	$460,000	13%	573	$510,000	22%	4,472	$469,000	11%
Cambridge	119	$1,250,359	39%	66	$1,100,000	38%	693	$571,889	26%
Chelsea	19	$280,000	10%	71	$385,000	28%	106	$225,000	17%
Lynn	331	$263,000	-4%	118	$334,950	23%	92	$150,500	-24%
Malden	213	$333,000	-2%	148	$466,500	15%	147	$239,900	-18%
Medford	259	$442,000	6%	116	$575,000	31%	196	$349,500	1%
Melrose	245	$491,500	9%	21	$470,000	-1%	92	$287,500	2%
Revere	149	$300,000	9%	94	$419,112	23%	117	$240,000	-9%
Somerville	44	$598,750	21%	96	$772,500	34%	475	$492,000	26%

Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Spatial Analysis of Residential Property Sales

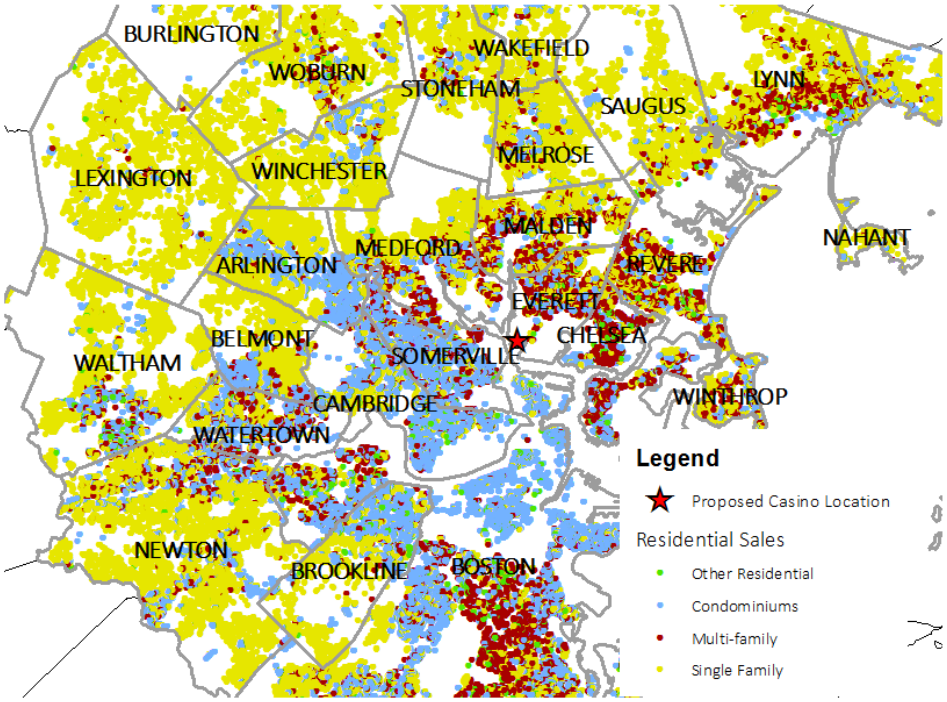
The impact of new developments, even large ones such as casinos, are often highly localized. Even dramatic changes in the immediate neighborhood may not necessarily register at the regional or community scale. This is especially true for larger communities where such impacts are often diluted by other activities. An analysis restricted to municipal boundaries also does not account for proximity to nearby communities. The proposed Everett casino is on the edge of the city, and may well have a greater impact on properties in other communities than properties in Everett that are much further away. Thus, a development on the border of a host community may only register a muted "impact" at the municipal scale, because its effects are essentially shared among several communities. Proximity can also be used to help distinguish development impacts from the background "noise" of other activities.

Whether positive or negative, the influence of the new development is generally assumed to diminish with distance—the further away, the lower the effect. Thus, comparing before and after changes at different distances can help us identify whether changing market conditions seem to be associated with the location of the new casino.[iii]

To get a better sense of the possible local impacts, we conducted an analysis of developmental impacts that directly accounts for proximity and distance. Of course, this type of spatial analysis requires considerably more data on the location of potentially impacted parties. Most of the data sources used in the host community profiles are only available at the community or county level—thus precluding a more fine-grained spatial analysis. However, the DOR database that we use to track real estate trends includes information about specific property sales, including street addresses and parcel ID numbers for each sale.

With the aid of Geographic Information System (GIS) software and considerable effort, we identified recent property sales in all communities within 10 miles (straight-line) distance of the proposed casino site. Using a multi-stage matching process, we were able to locate over 99 percent of the listed sales down to the latitude and longitude coordinates of individual parcels.[iv] Then we measured the distance of each sold parcel to the proposed casino site, and calculated the number of sales and median sales price of properties at varied distances from the site.

Figure 11: The Location of Real Property Sales by Land Use Type, 2008 to 2014



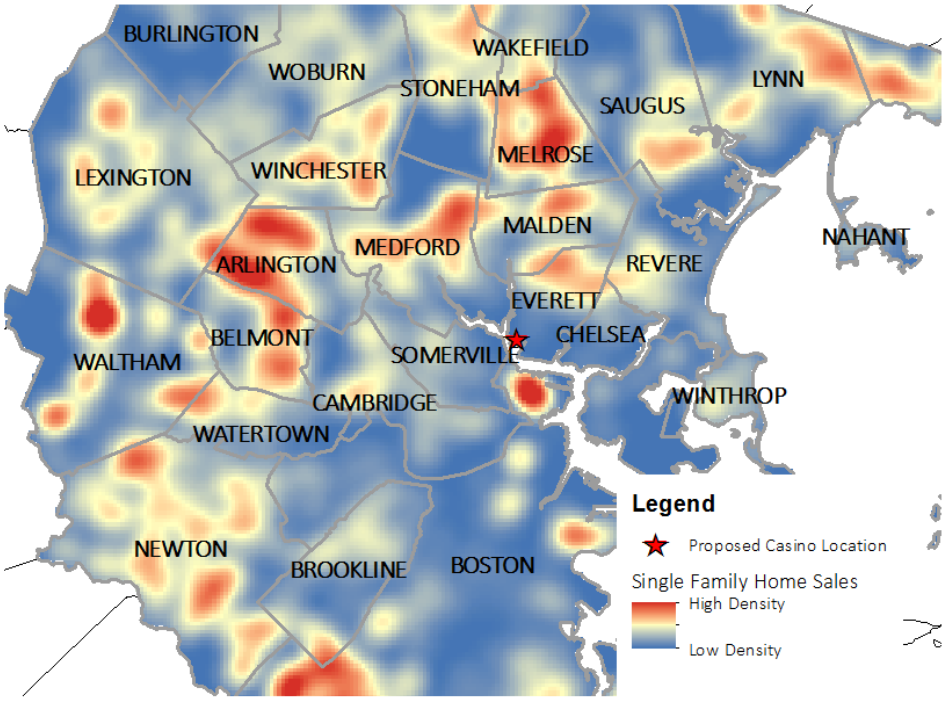
Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Figure 11 shows the location of parcel sales in the Everett region from 2008 to 2014, distinguished by major types of residential land use. With over 110,000 matched sales packed into such a dense region, it is difficult to surmise much about the spatial distribution of property sales solely from this figure.

Many of the sales rest on top of one another in the map. It is clear that condominiums and multi-family home sales are more prominent in the urban core, while single-family sales are the norm for the outer edges of the region.

To get a better sense of the location of recent sales we conducted a hot-spot analysis to highlight areas where residential sales are particularly dense.[v] We did this first for single-family homes (Figure 12) and then for multi-family homes (Figure 13) and condominiums (Figure 14).[vi] While single-family home sales are indeed highly concentrated on the periphery, we do see some heavy concentrations closer to the casino site, namely in the Bunker Hill neighborhood in the northern portions of Boston as well as in the northern sections of Everett itself (Figure 12).

Figure 12: Areas of Concentrated Single-family Home Sales, 2008 to 2014

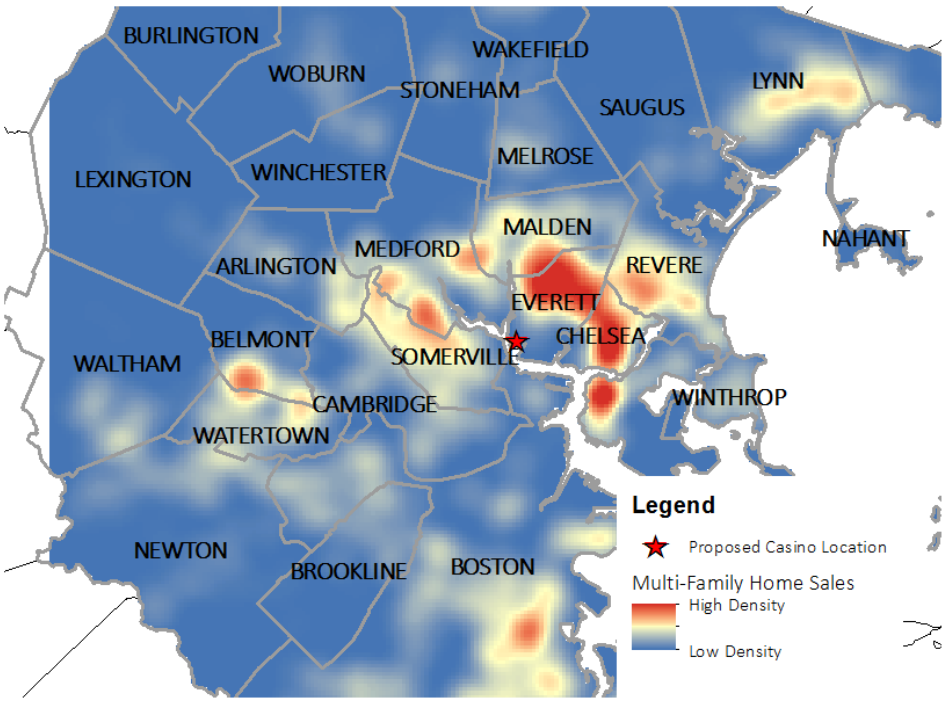


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Some of the heaviest concentrations of recent multi-family home sales are in areas just to the north, east and west of the proposed casino site (Figure 13). This includes portions of Everett as well as Chelsea, East Boston, Malden, Somerville and Medford. Condominium sales are densely concentrated in the City of Boston, so much so that they tend to obscure sales in other areas (Figure 14).

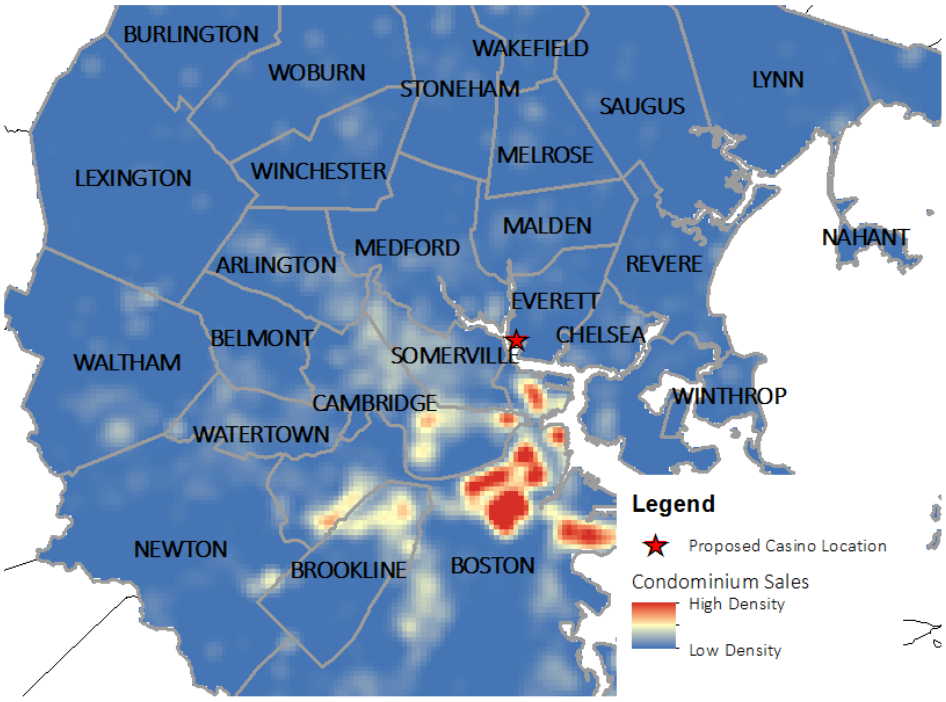
These types of "heat maps" are useful for visualizing differences in property markets and identifying where recent sales activity is particularly high. They cannot directly answer the questions of whether the casino had an impact on local markets and how far these impacts extend from the development site. For that, we monitor sales trends at different distances from the casino site: within one mile, one to two miles, two to five miles, five to seven miles and seven to ten miles. The apparent impacts of the casino can be identified by measuring changes in trends before and after the construction of the casino. We expect the biggest impacts will be felt closer to the site.

Figure 13: Areas of Concentrated Multi-family Home Sales, 2008 to 2014



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Figure 14: Areas of Concentrated Condominium Sales, 2008 to 2014

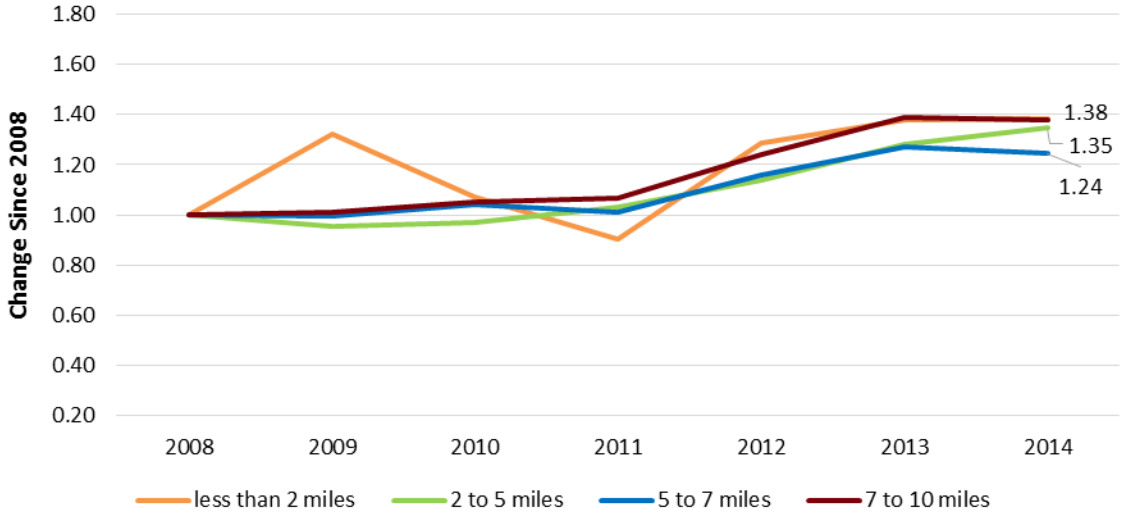


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Past trends in single-family sales volume seem to have little relation to distance from the casino site. At nearly every distance, we find a fairly steady and incremental increase in the number of sales over time (Figure 15). This consistency bodes well for identifying impacts as possible breaks in what otherwise appears to be a predictable trend in the absence of a casino or other major area development. The year-to-year sales within two miles are somewhat erratic, mainly because of the small number of single-family homes close to the proposed casino site in any given year (
There are more condominium and multi-family home sales near the proposed casino location. This makes it easier to distinguish true impacts from patterns influenced by a small number of outliers (**Error! Not a valid bookmark self-reference.**). Multi-family sales trends appear to follow two divergent trends (Figure 16). Those further from the site (> 5 to 10 miles) saw steady growth in sales volume from 2008 to 2010. The number of sales closer to the site (< 5 miles) was generally flat during this time. However, since 2010, both near and far have witnessed a steady increase in sales growth (Figure 16). Sales trends for condominiums appear generally to have no relationship to distance—all share a common pattern of slight decline through 2011 followed by rapid growth to 2013 (Figure 17). There may be an apparent divergence starting in 2014, as sales at distances less than seven miles seem to dip while sales at seven to ten miles continued on an upward trend. However, only time will tell if this trend continues in the future.

Table 2). Despite this, we feel that there is more than a sufficient number of sales to proceed with analysis at these scales.

Figure 15: Single-family Home Sales by Distance to Casino, Change from 2008



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

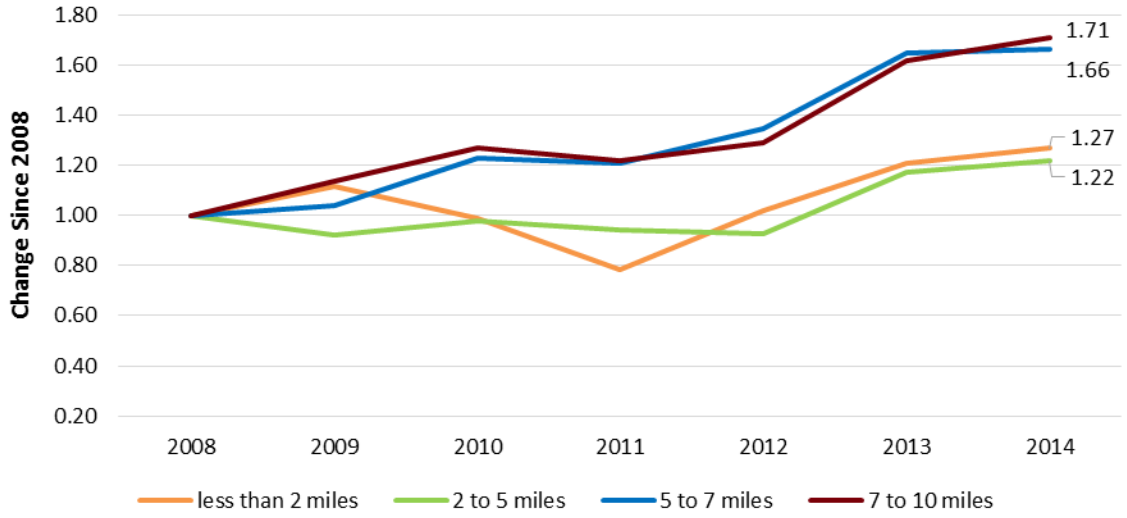
There are more condominium and multi-family home sales near the proposed casino location. This makes it easier to distinguish true impacts from patterns influenced by a small number of outliers (**Error! Not a valid bookmark self-reference.**). Multi-family sales trends appear to follow two divergent trends (Figure 16). Those further from the site (> 5 to 10 miles) saw steady growth in sales volume from 2008 to 2010. The number of sales closer to the site (< 5 miles) was generally flat during this time. However, since 2010, both near and far have witnessed a steady increase in sales growth (**Figure 16**). Sales trends for condominiums appear generally to have no relationship to distance—all share a common pattern of slight decline through 2011 followed by rapid growth to 2013 (Figure 17). There may be an apparent divergence starting in 2014, as sales at distances less than seven miles seem to dip while sales at seven to ten miles continued on an upward trend. However, only time will tell if this trend continues in the future.

Table 2: Distance-Based Analysis of Number of Sales by Property Type

Distance from Casino	2008	2009	2010	2011	2012	2013	2014	Percent Change 2008-2014	Total Change 2008-2014
Single Family Homes									
less than 2 miles	164	217	176	148	211	226	227	38%	63
2 to 5 miles	984	937	954	1,015	1,121	1,260	1,324	35%	340
5 to 7 miles	1,127	1,121	1,173	1,138	1,304	1,434	1,403	24%	276
7 to 10 miles	2,200	2,226	2,313	2,343	2,728	3,059	3,033	38%	833
Multi-Family Homes									
less than 2 miles	224	250	221	175	228	271	284	27%	60
2 to 5 miles	591	544	579	557	547	694	719	22%	128
5 to 7 miles	256	266	315	309	344	422	425	66%	169
7 to 10 miles	306	347	388	373	395	495	523	71%	217
Condominiums									
less than 2 miles	762	606	650	643	921	1,085	856	12%	94
2 to 5 miles	4,299	3,861	3,863	3,718	4,645	5,060	4,591	7%	292
5 to 7 miles	1,541	1,402	1,299	1,175	1,545	1,941	1,805	17%	264
7 to 10 miles	1,257	1,241	1,157	1,036	1,306	1,607	1,866	48%	609

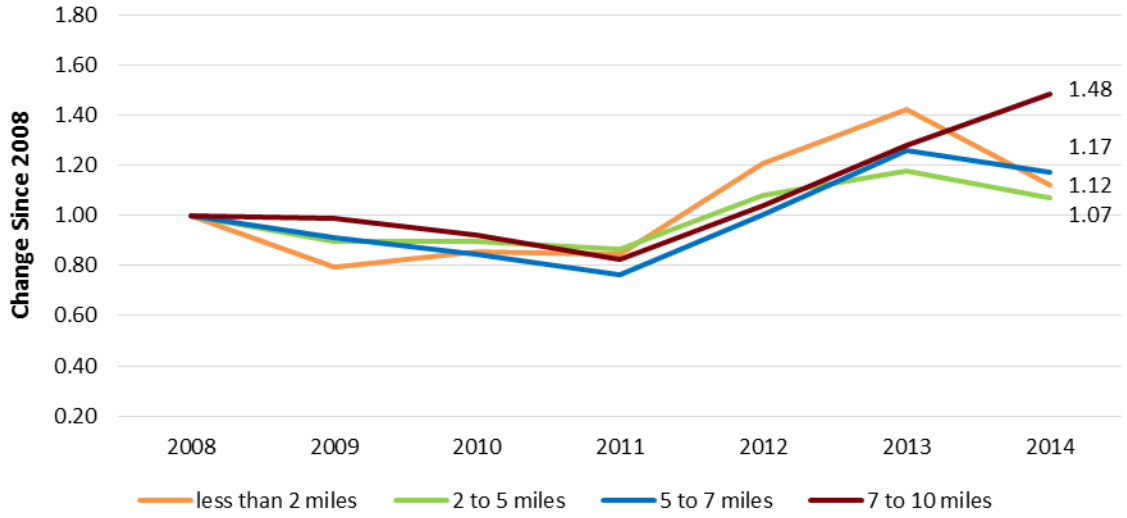
Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Figure 16: Multi-family Home Sales by Distance to Casino, Change from 2008



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Figure 17: Condominium Sales by Distance to Casino, Change from 2008

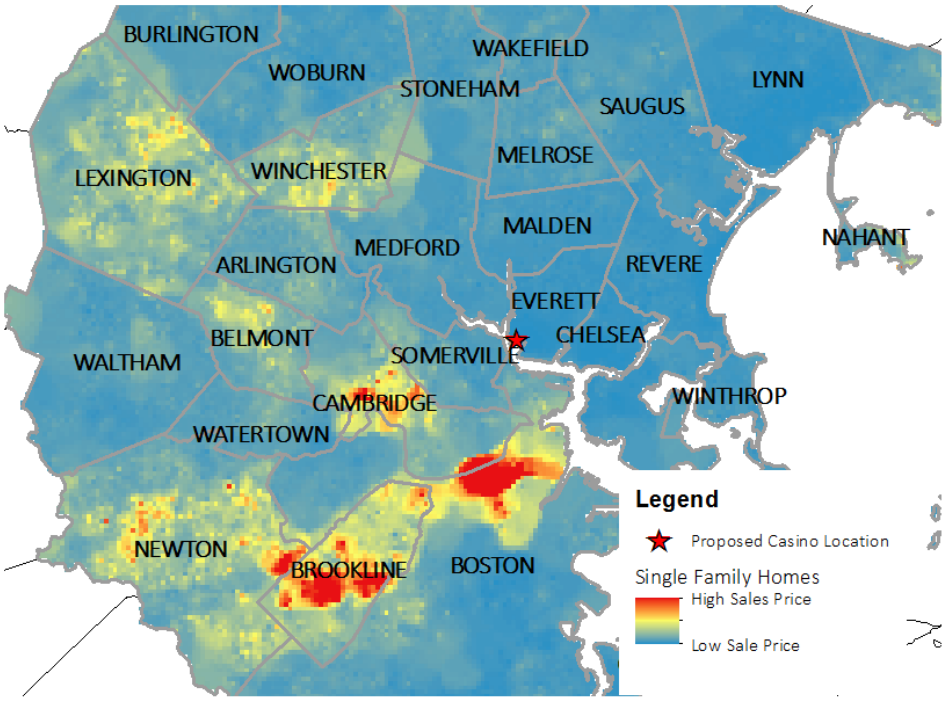


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

In addition to measuring localized changes in the volume of sales, our spatial analysis allows us to document changes in the price of recent home sales at a variety of spatial scales. We start by identifying hot spots (indicated in red on the map) where the median sale price of homes is exceptionally high (Figure 18).[vii] This type of information is not only useful for documenting possible impacts of the casino, but also in identifying areas potentially at risk of gentrification.

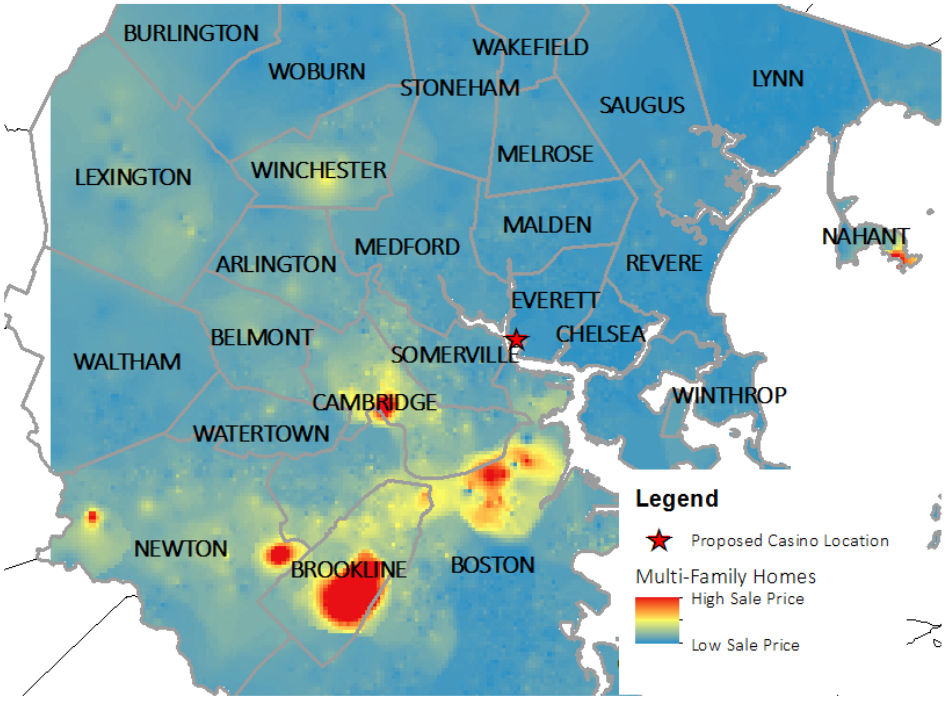
The highest priced single-family homes are most heavily clustered in Cambridge, Boston, and Brookline. There are also high-priced hot spots on the Western edge of the region: namely parts of Belmont, Lexington, Newton and Winchester. Many of these same areas also tend to have the most expensive condominiums and multi-family homes (Figure 19 and Figure 20). Everett, Chelsea, Malden and much of the area to the immediate northeast of the proposed site are more akin to cold spots (darker blue on the map)—areas where there is a concentration of lower-priced homes. This is consistent with our earlier findings that these communities tend to be more affordable areas for buying a home.

Figure 18: Spatial Variations in the Sale Price of Single-family Homes, 2008 to 2014



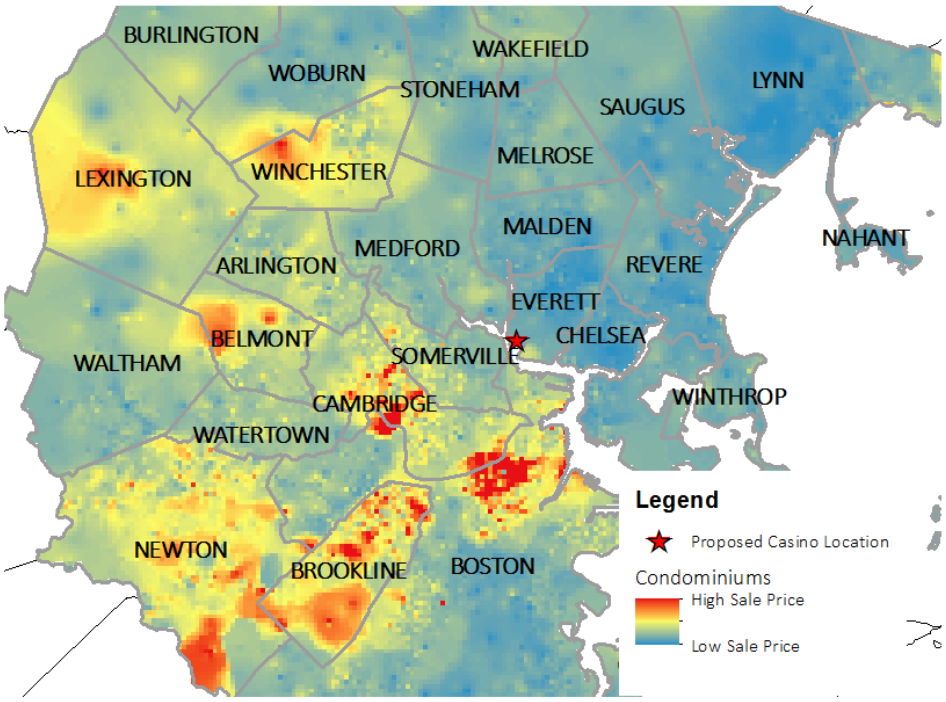
Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Figure 19: Spatial Variations in the Sale Price of Multi-family Homes, 2008 to 2014



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Figure 20: Spatial Variations in the Sale Price of Condominiums, 2008 to 2014

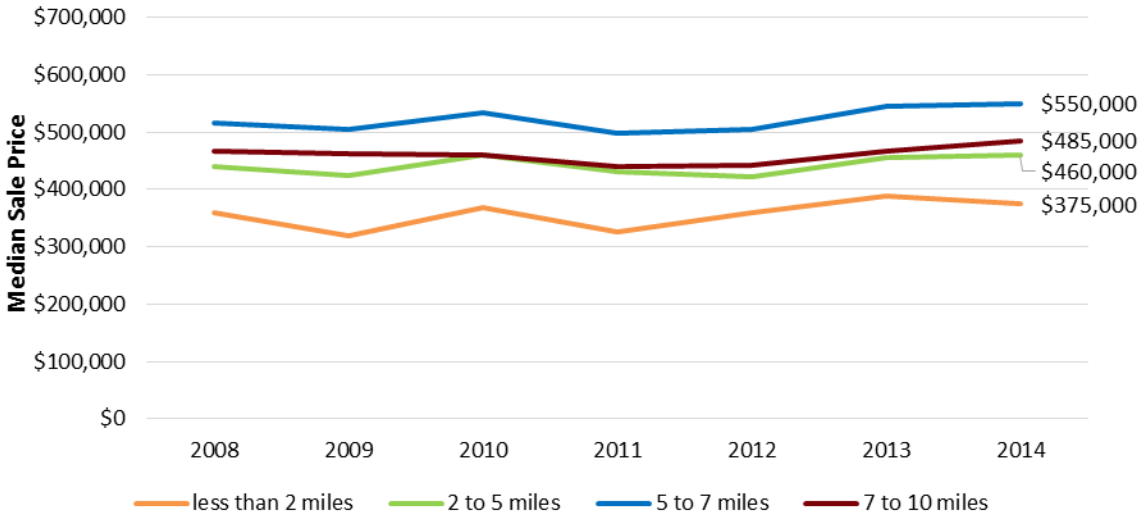


Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

When classified by distance from the proposed casino site, we find very little change in median prices over time. This is true for both single-family homes (Figure 21) as well as multi-family homes (Figure 22). For these two housing types, we find that distance from the proposed site does matter in the median sale price, but not to the rate of growth. Single- and multi-family homes tend to be cheaper the closer one gets to the proposed site—peaking at five to seven miles. This peak distance (5-7 miles) captures many of the wealthier suburbs, such as Brookline, Newton, and Winchester. Beyond seven miles, prices begin to decline again.

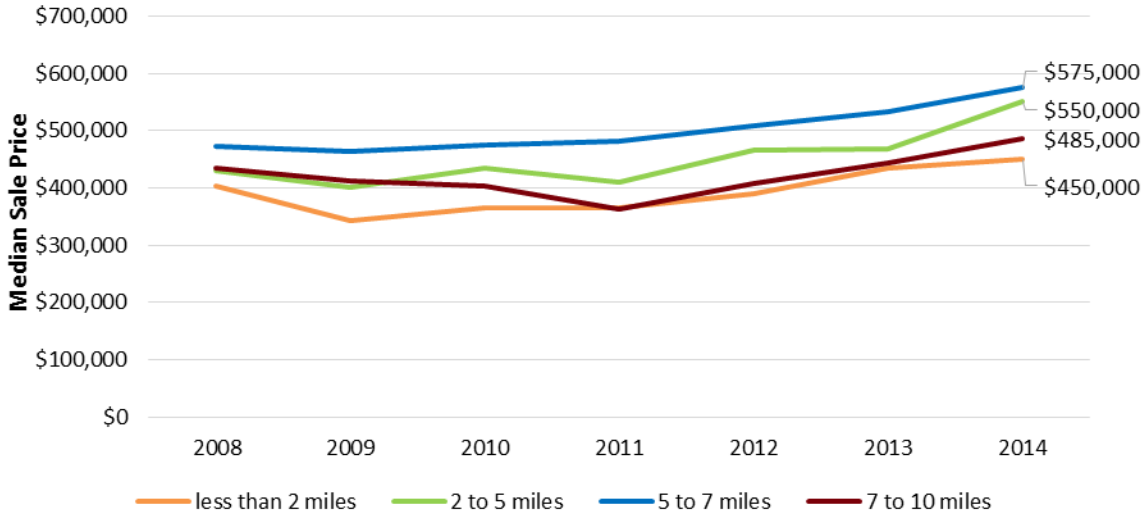
The condominium market shows a different pattern. In this market, the priciest condominiums are those within the 2 to 5 miles of the proposed casino site (Figure 23). This distance band includes much of Cambridge and Boston as well as portions of Brookline that were previously identified as hot spots for high priced condominium sales. The most affordable condominiums tend to be those furthest from the site. Unlike single and multi-family homes, there does appear to be some relationship between distance and the rate at which prices have been rising. The price of condominiums in the 2 to 5 mile band have been rising faster in recent years than those further away. This is more likely related to variable conditions in particular sub-markets (such as Cambridge, Boston, Somerville and Chelsea) rather than related to proximity to the site itself.

Figure 21: Single-family Homes, Median Sale Price (2014 dollars) by Distance to Casino, 2008 to 2014



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

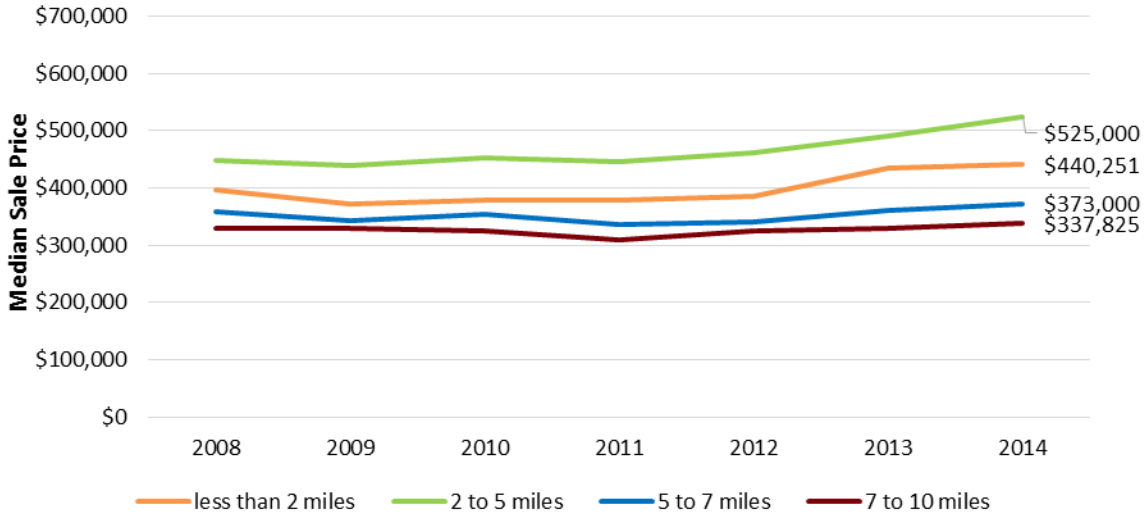
Figure 22: Multi-family Homes, Median Sale Price (2014 dollars) by Distance to Casino, 2008 to 2014



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Overall, our examination of past tends in residential sales bodes well for our ability to detect possible changes in real estate values. The recession has clearly had an impact on residential sale markets—temporarily depressing sales volume more than prices. Even so, past trends in sales volumes and values have remained relatively consistent, meaning that they can be used to identify casino-related impacts as this analysis proceeds. This appears to be particularly true for the distance-based trends. There are, however, major differences between communities, and it is still unclear whether the state and Immediate Region provide a sufficient baseline of comparison and whether there are enough single-family home sales within a mile of the site to permit reliable analysis at this fine level of detail.

Figure 23: Condominiums, Median Sale Price (2014 dollars) by Distance to Casino, 2008 to 2014



Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

Table 3: Summary, Distance-Based Analysis of Median Sales Prices (2014 dollars)

Distance from Casino	2008	2009	2010	2011	2012	2013	2014	Percent Change 2008-2014	Total Change 2008-2014
Single Family Homes									
less than 2 miles	$358,875	$319,000	$369,428	$325,185	$359,470	$387,600	$375,000	4%	16,125
2 to 5 miles	$440,825	$423,500	$460,798	$430,500	$422,403	$454,920	$460,000	4%	19,175
5 to 7 miles	$517,000	$504,900	$534,100	$498,750	$505,771	$545,700	$550,000	6%	33,000
7 to 10 miles	$467,500	$462,000	$459,980	$439,110	$442,900	$466,140	$485,000	4%	17,500
Multi Family Homes									
less than 2 miles	$402,875	$343,750	$365,150	$365,400	$388,825	$433,625	$450,000	12%	47,125
2 to 5 miles	$429,000	$401,500	$434,910	$409,500	$465,560	$469,200	$550,000	28%	121,000
5 to 7 miles	$473,000	$464,475	$474,150	$481,950	$509,335	$532,695	$575,000	22%	102,000
7 to 10 miles	$434,500	$412,500	$403,300	$362,250	$407,880	$442,680	$485,000	12%	50,500
Condominiums									
less than 2 miles	$396,000	$371,800	$378,775	$378,000	$386,250	$433,500	$440,251	11%	44,251
2 to 5 miles	$447,700	$438,900	$453,440	$446,250	$462,470	$489,600	$525,000	17%	77,300
5 to 7 miles	$357,500	$343,200	$354,250	$336,000	$339,900	$361,080	$373,000	4%	15,500
7 to 10 miles	$330,000	$329,890	$325,910	$309,750	$325,480	$330,480	$337,825	2%	7,825

Source: MA Department of Revenue, Division of Local Services, LA-3 Real Estate Sales

The Residential Rental Market

Rental properties are the final component of our analysis of baseline housing market conditions. In many of the potentially impacted communities rental housing is just as common, as owner-occupied dwellings, if not more so. This is especially true in predominantly urban communities such as Everett, where more than 75 percent of residents living in rented properties according to the most recent estimates from the American Community Survey. The majority of renters (88 percent) live in multi-unit structures—such as apartment buildings with more than two units.

Table 4: Real Median Rents (monthly), 2000 and 2009/13 (2014 dollars)

	Contract Rent ($)				Gross Rent ($)			
Area	2000	2009-13 (ACS)	Change	Percent Change	2000	2009-13 (ACS)	Change	Percent Change
Everett	$892	$1,053	$161	18%	$999	$1,181	$182	18%
Immediate Region								
Essex County	$804	$928	$124	15%	$911	$1,064	$153	17%
Middlesex County	$1,041	$1,185	$144	14%	$1,144	$1,312	$168	15%

Suffolk County	$974	$1,158	$184	19%	$1,084	$1,290	$207	19%
Massachusetts	$829	$955	$126	15%	$937	$1,090	$153	16%
Surrounding Communities								
Boston	$989	$1,175	$186	19%	$1,100	$1,307	$207	19%
Cambridge	$1,249	$1,566	$316	25%	$1,318	$1,644	$326	25%
Chelsea	$847	$1,033	$187	22%	$952	$1,155	$202	21%
Lynn	$740	$865	$125	17%	$833	$978	$145	17%
Malden	$971	$1,122	$151	16%	$1,064	$1,235	$171	16%
Medford	$1,006	$1,303	$297	30%	$1,122	$1,462	$340	30%
Melrose	$974	$1,052	$78	8%	$1,041	$1,130	$89	9%
Revere	$908	$1,080	$172	19%	$995	$1,216	$221	22%
Somerville	$1,092	$1,305	$213	19%	$1,197	$1,447	$250	21%

Source: U.S. Census Bureau, 2000 Decennial Census and the 2009-13 American Community Survey Five-Year Estimates

While no doubt important, the data on rental market conditions is not as robust as property sales. The most comprehensive source is the American Community Survey (ACS) produced by the U.S. Census Bureau. While collected on annual basis, the ACS pools data across multiple years to ensure a sufficient sample size for smaller geographies. The relevant data for most municipalities is only available in five-year chunks, with the most recent data pooled from 2009 to 2013 at the time of writing. This data cannot be used to track changes market conditions on a year-to-year basis. It is, however, useful for providing a static picture of the rental market that is useful to validate or otherwise qualify rental data collected from other sources. Table 4 reports both contract rents, the amount the tenant pays each month to their landlord, as well as gross rents, which attempts to account for the fact that some contracts rents include utilities while others do not.

We focus on gross rents, which are likely more indicative of the true costs of rental housing. Gross monthly rents in Everett are slightly higher than the state median, but toward the low end of communities in the region. Everett rents are essentially on par with Chelsea and Melrose, with only Lynn showing noticeably lower median monthly rents. Everett is also in the low-to-middle end of its neighbors when it comes to long-term changes in median rents. Between 2000 and 2009/13 real monthly gross rents in Everett increased by 18 percent or $182 dollars. This is more than the state as a whole but less than six of the nine official surrounding communities. Even among communities that experienced greater real dollar increases, Everett is not that far behind.

Residential rent prices over time

To track changes in the price of rental housing, we turn to a proprietary database provided by CoStar. CoStar boasts itself as the nation's largest provider of data on commercial properties. It is also the force behind the online rental listing service Apartments.com, arguably the largest and most comprehensive real-time source of data on national and local rentals. CoStar reports average rents on a quarterly basis with almost no lag, making it ideal for closely monitoring changing market conditions. CoStar also reports both average "reported" rents and average "effective" rents. Reported rents are comparable to what the ACS calls contract rents. Effective rents are more akin to ACS-defined gross rents, because

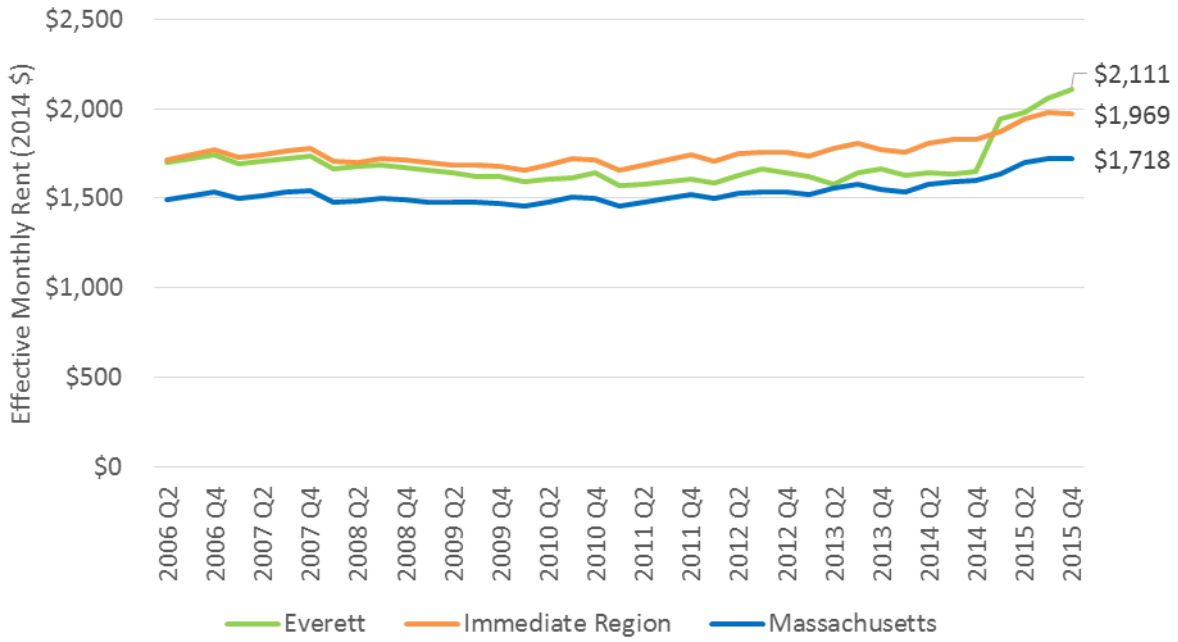
they attempt to account for the fact that some contract rents include utilities while others do not. Unless otherwise stated, we focus our review on effective rents.

Monthly effective rents reported by CoStar are notably higher than monthly gross rents in the ACS (Figure 24).[viii] The CoStar monthly average from 2009 to 2013 was $1,527 per unit, while the ACS reported a monthly median of $1,181. While we expect some differences, this is rather substantial. It could be that by reporting a mean, CoStar is particularly susceptible to the influence of outliers—a relatively small number of extremely expensive rentals that pull up the average. However, we calculated an equivalent ACS gross mean at just under $1,200—making outliers an unlikely culprit. The difference may be because CoStar is more reflective of rentals in multi-unit buildings, and perhaps these are more expensive. However, this also does not appear to be the case; the average ACS rent for units in multi-unit structures is almost identical to the overall average. Another possibility is that ACS reports rental costs paid by households while CoStar reports rents from listings. Presumably, it is more difficult to raise rents on existing tenants than on available units, so tenants pay less than the going market rate. We lack the data to test whether this is actually the case; however, if true, then the CoStar data may actually be a more sensitive leading indicator of changes in rental markets than data gathered from household surveys. Assuming that CoStar provides a valid, although perhaps incomplete, indicator of changing rental market condition, we proceed with our investigation of recent trends in rental prices relative to the Immediate Region and state.[1]

Since 2006, rents in Everett have been either flat or growing very slowly. The pace of increase began rising slightly after 2012, although it still trailed the state and particularly the Immediate Region. The current year (2015) is an exception where market rents in Everett shot up by a whopping 17 percent in the first quarter with this high rate of growth sustained through the second and third quarters of the year. It is not entirely clear why this has happened. CoStar also reports data on the inventory of rental units, and the rise in rental prices coincides with the addition of over 300 units. Over the same time period (Q4 2014 to Q1 2015), CoStar reports a substantial rise in the number of vacant units (+ 215), which may indicate a dramatic change in the rental stock pushing toward more high-end units. It may also reflect changes in the way the data is collected or some kind of estimation error.

[1] In their review of this report, the City of Everett cautioned that rents within the city may be somewhat higher than those reported by CoStar or other real estate tracking services. One factor that may play a role in this is that, while much of the available housing in Everett is rental housing, a lot of that housing may not be marketed through the online rental listings which feed databases like CoStar, but rather through storefront rental agencies and private arrangements between owners and tenant.

Figure 24: Effective Monthly Rents, Everett vs. the Immediate Region and State, 2006 to 2015 (Q3)



Source: The CoStar Group Inc.

Building Permits

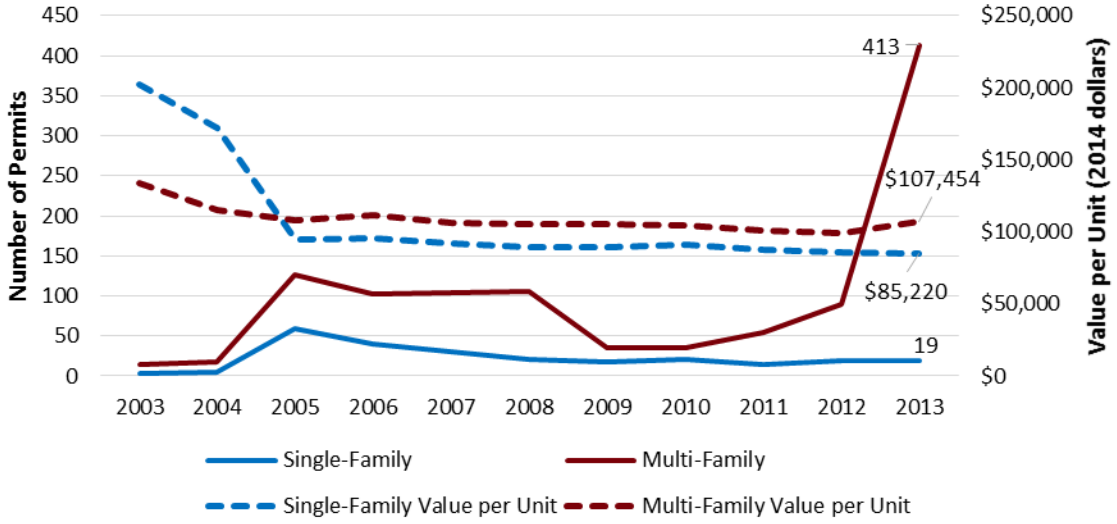
Building permits are an important prerequisite for new development. Municipal officials, demographic forecasters and real estate analysts alike monitor building permit applications in order to get a sense of changing population trends two or three years in advance.

The data on building permits comes from the U.S. Census Bureau's Manufacturing and Construction Division.[ix] Particular caution is needed when considering building permit trends, especially at the town level. Even with imputation, the number of building permits issued can vary greatly from year to year. A single large-scale development can create abrupt bumps and dips in annual permitting trends. Permits, like the real estate market more generally, are also sensitive to broader economic conditions and business cycles—making it difficult to establish a regular "baseline" trend that can be used later to measure impacts. With these important caveats in mind, we proceed with our examination of recent trends.

The dominance of multi-family units in Everett is reflected by the City's building permits. The number of multi-family building permits regularly exceeds the number of permits issued for single-family units (Figure 25). On average over the past decade, Everett issued just over 22 single-residence permits per year, and just under 100 permits for multi-family units. However, such averages can be misleading, because the number of permits issued is rather volatile. As a case in point, the first year of our observation period (2003) was a low year for permitting in Everett, with permits issued for only three single-family and 14 multi-family units. By contrast, 2013 was a banner year for multi-family permits. The Census Bureau estimates that over 400 permits were issued that single year – more than the preceding five years combined. It could be that the lingering impact of the housing market crash created

a glut of pent-up demand. Regardless, this is not a normal event, nor is it likely indicative of changing trends.

Figure 25: City of Everett, Number and Per Unit Value of Residential Building Permits



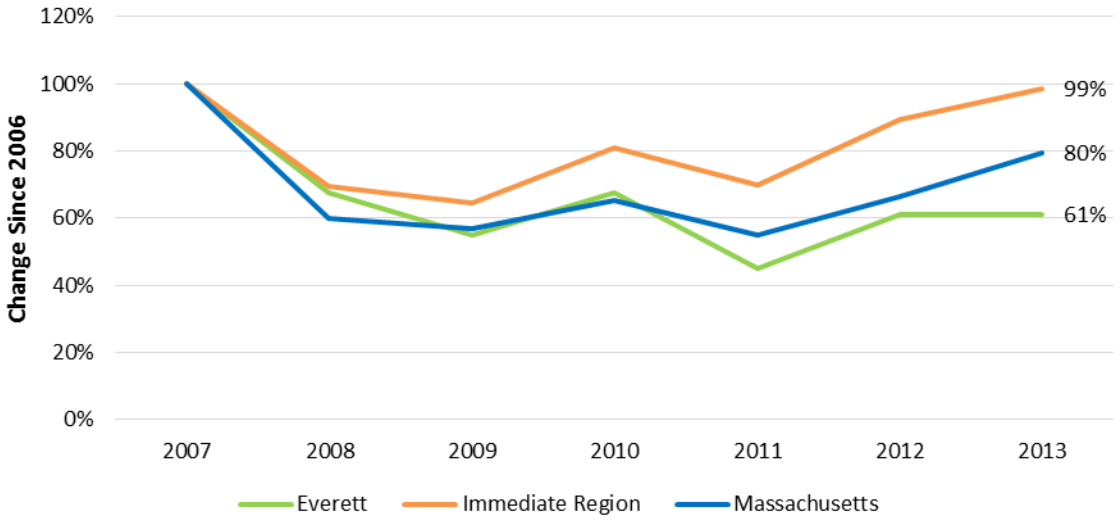
Source: U.S. Census Bureau, Residential Construction Branch

The monetary value of issued permits tends to be more stable than the number of permits, although it is still sensitive to the number of permits.[x] Consider 2003 and 2004, when Everett issued few permits (Figure 25). The average value of permits was much higher in these years, possibly due to the permitting of a small number of particularly expensive housing projects. Disregarding those early years, the overall pattern in Everett is of a very slight and gradual decline in the real dollar value of single-family permits. Multi-family permits have also tended to decline in value over the past decade, although 2013 saw a slight increase in value over 2012.

To put these trends into context, we compare the annual change in the number and value of residential building permits against regional (i.e., Essex, Suffolk and Middlesex Counties) and statewide trends. We use 2007 as the base year for this comparison, given the abnormally low permitting activity in the early 2000s followed by a spike in 2005 and 2006.

Everett experienced a gradual decline in the number of single-family permits issued from 2007 through 2011, but has experienced a slight rebound in the past few years (Figure 26). This city-level trend generally coincides with broader trends, although both the state and region have witnessed a bit more of a post-recession bump in permitting relative to Everett.

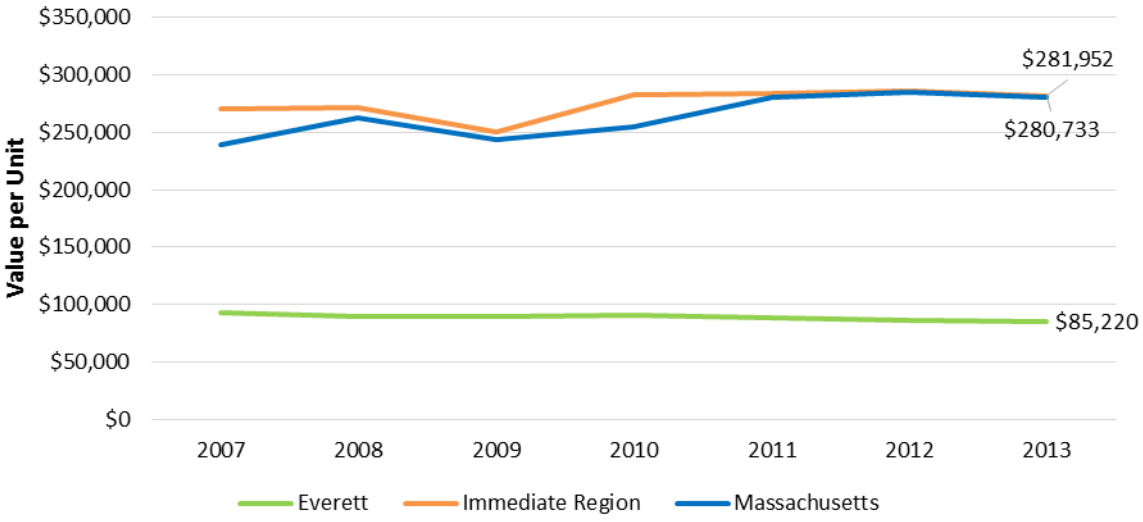
Figure 26: Change in Single-family Building Permits from 2007



Source: U.S. Census Bureau, Residential Construction Branch

The per-unit value of single-family permits has been more stable (Figure 27) across regions. Everett consistently falls far short of the state and Immediate Region in terms of permit value, with residential project values averaging just over $90,000 since 2003 compared to a regional average of nearly $275,000 and a statewide average of just over $250,000. As stated previously, the housing stock in Everett is different from most other places. Given Everett's density and relatively high degree of build-out, there is little room for the types of large plot, and high-value "McMansion" style suburban homes that have been favored by developers elsewhere in the state over the past two decades. The real dollar value of permits in Everett has also been on the decline, but just ever so slightly. At the same time, the average single-family permit value has shown a gradual increase for both the Immediate Region, as well as the state as a whole.

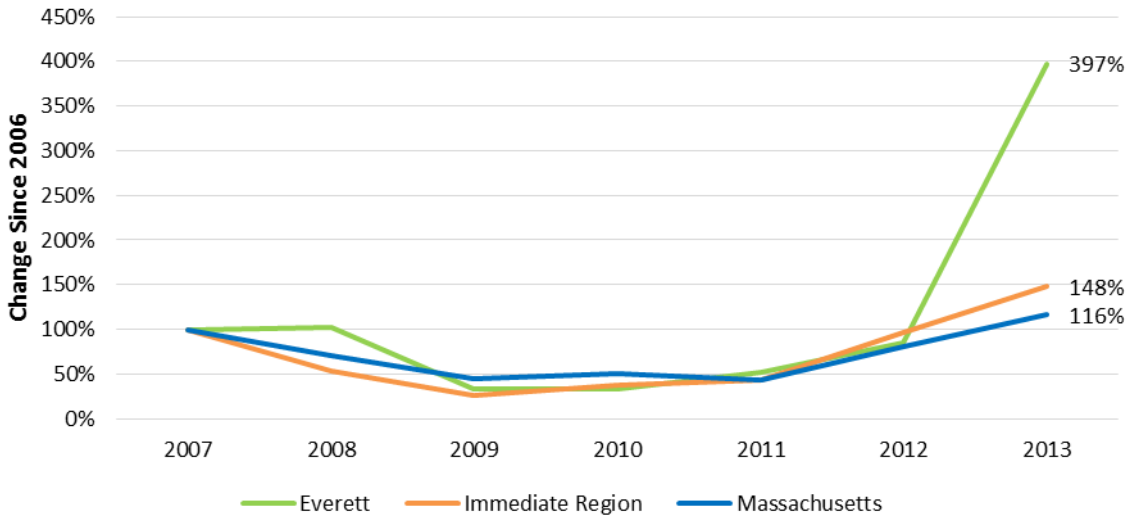
Figure 27: Average Value of Single-family Building Permits from 2007



Source: U.S. Census Bureau, Residential Construction Branch

Multi-family units are far more characteristic of Everett's housing stock. The pace of growth in the number of multi-family permits (including condominiums) issued by Everett is generally consistent with the Immediate Region and state (Figure 28). Each experienced a slight decline from 2007 to 2009 with a gradual increase starting in 2010. The major exception is between 2012 and 2013, when permits for multi-family housing in Everett increased dramatically. However, this is likely an anomalous, one-time, occurrence.

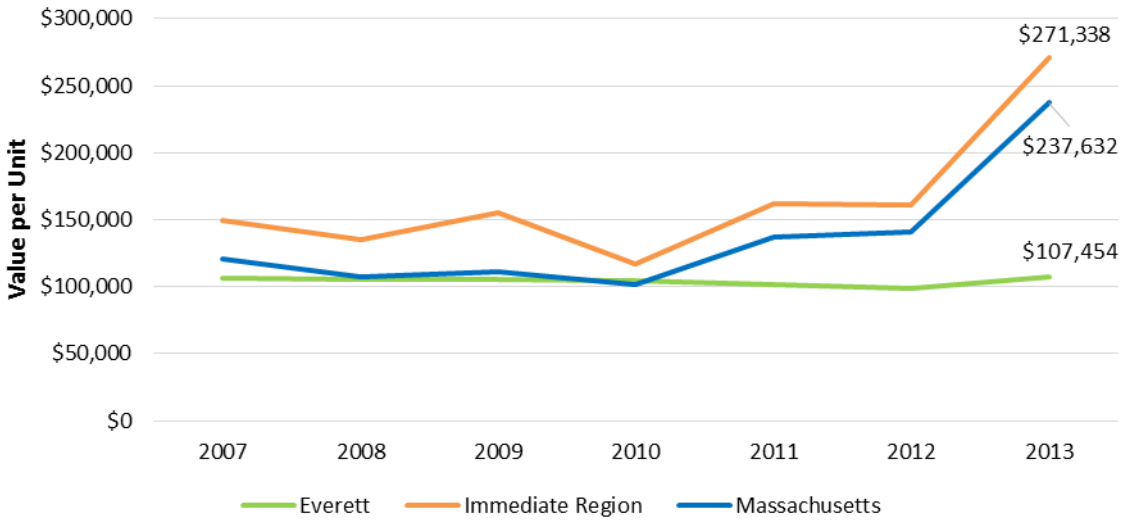
Figure 28: Change in Multi-family Building Permits, 2007 to 2013



Source: U.S. Census Bureau, Residential Construction Branch

The value of multi-family permits in Everett has been steady since 2007, hovering close to the $100,000 mark on a per unit basis (Figure 29). The value of multi-family permits in Everett has been on par with the statewide average for much of the study period, both just slightly less than the Immediate Region. However, both state and region have experienced a sharp rise in the value of multi-family permits since 2012, whereas Everett has remained essentially flat.

Figure 29: Average Value of Multi-family Building Permits, 2007 to 2013



Source: U.S. Census Bureau, Residential Construction Branch

Table 5 provides a summary of building permit activity in Everett and its surrounding communities. Again, the irregular nature of building permits confounds consistent comparisons at the municipal level, especially over time when measured as rates of change. However, we do find that the value of permits in Everett, while considerably lower than Boston and Cambridge, are within the ballpark of other inner-ring communities in the Boston region. The average value for single-family permits in Everett tends to be lower than most other neighboring communities, while the value of its multi-family permits tend to be slightly higher.

Table 5: Building Permit Summary, Everett and Surrounding Communities

Building Permit Indicators, Everett and Surrounding Communities	Single-family Building Permits				Multi-family Building Permits			
	Number (2013)	% Change in Number 2009-2013	Value (2013)	% Change in Value 2009-2013	Number (2013)	% Change in Number 2009-2013	Value (2013)	% Change in Value 2009-2013
Massachusetts	7,100	40%	$280,733	15%	7,469	161%	$237,632	114%
Everett	19	12%	$85,220	-5%	413	1080%	$107,454	2%
Surrounding Communities								
Boston	34	-11%	$237,677	-4%	2,527	760%	$446,920	124%
Cambridge	16	45%	$428,124	-65%	979	n/a	$200,673	n/a
Chelsea	0	n/a	-	n/a	332	655%	$95,097	-35%
Lynn	23	229%	$150,317	-24%	3	50%	$96,220	33%
Malden	8	167%	$112,457	-29%	2	0%	$70,635	-34%
Medford	3	n/a	$190,513	n/a	4	n/a	$99,450	n/a
Melrose	9	50%	$190,887	-19%	52	n/a	$99,752	n/a
Revere	4	300%	$148,507	-43%	10	n/a	$117,147	n/a
Somerville	0	-100%	-	-100%	0	n/a	-	n/a

Source: U.S. Census Bureau, Residential Construction Branch

In conclusion, we find that the data on building permits, while having some value in helping us understand changing conditions in residential construction, may be too erratic and fraught with estimation ambiguities to identify possible development impacts of casinos. We will continue to monitor and track building permits moving forward, but will couple our analysis with sufficient warnings and caveats.

Commercial and Industrial Real Estate

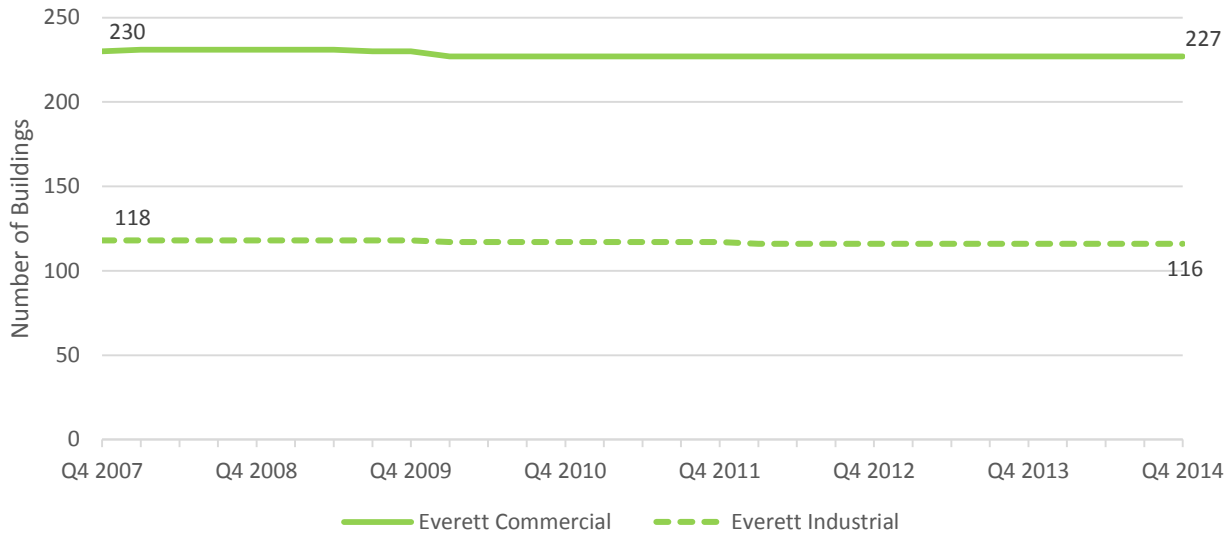
The market for commercial and industrial real estate is another important indicator of the health and nature of an area's economy. This section of the report analyzes Everett's commercial and industrial real estate inventory, vacancy rates, and lease rates. We use data from CoStar, a commercial real estate analytics firm, to provide information on certain indicators not generally tracked in publicly available data sources, such as net absorption and lease rates per square foot. This analysis covers the 7-year period between the end of last quarter of 2007 and the last quarter of 2014.[xi]

This section of the report is divided into three sub-sections, each of which addresses a key concept for evaluating a community's real estate market. The first section addresses inventory, including the number of buildings in the community, and seeks to demonstrate the size of a community's real estate market dedicated to business activities. The second section addresses vacancy and absorption to illustrate the effective utilization of existing space. The final section addresses lease rates and sheds light on the market prices paid for commercial and industrial space within a community. When taken as a whole, these measures describe the nature of Everett's commercial and industrial real estate market in the period immediately preceding the development of the Wynn Resort in Everett.

Inventory

The city of Everett is one of the smallest communities in Massachusetts in terms of area, covering only 3.7 square miles (0.3 miles of which are water). Everett is very densely populated and built out. It is therefore not surprising that Everett's inventory of commercial and industrial buildings has changed little since we began measuring trends in 2008 (Figure 30). Both the commercial and the industrial building inventory of Everett has fallen slightly since the end of 2007, with three less commercial buildings and two less industrial buildings compared to seven years earlier.

Figure 30: Everett, Number of Commercial and Industrial Buildings, 2008 to 2014

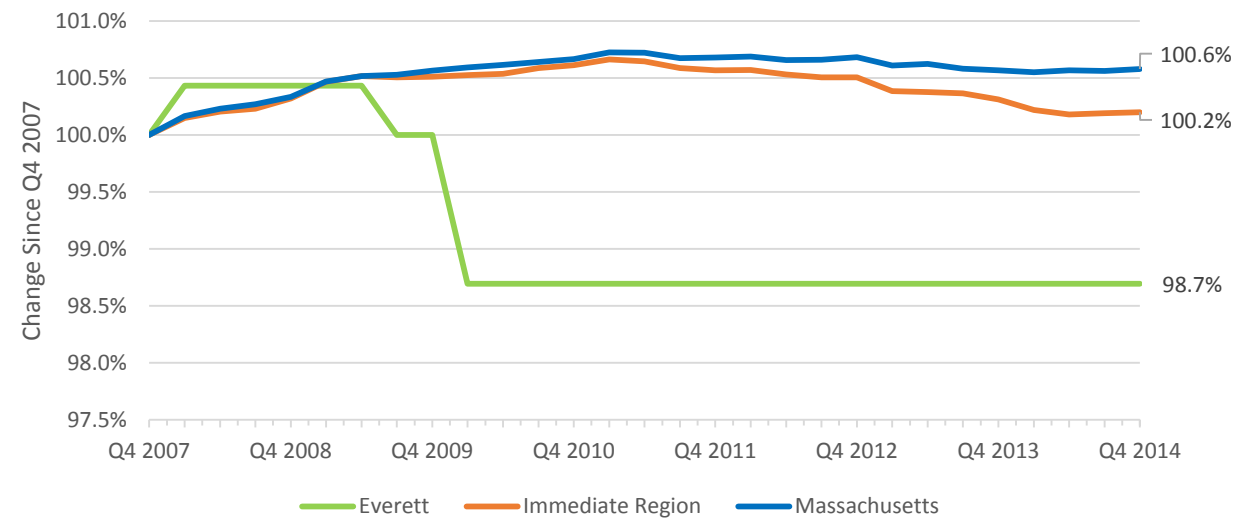


Source: The CoStar Group Inc.[xii] *Data used in this section are quarterly data.*

While the number of commercial buildings in Everett has declined, the number of commercial buildings in the Immediate Region and state have both risen, if only very slightly.

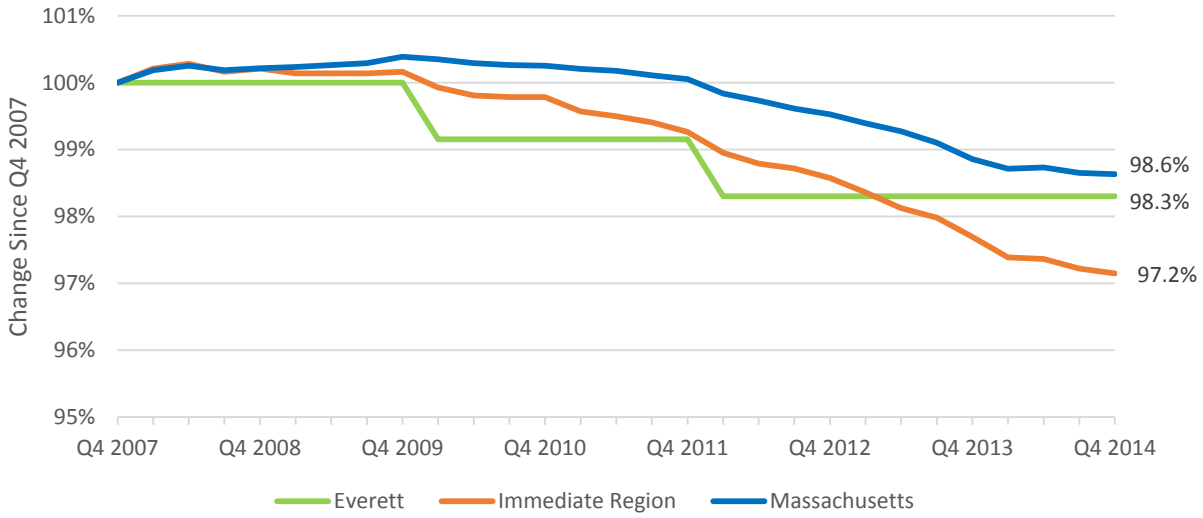
In terms of industrial buildings, Everett's experience more closely mirrors that of the Commonwealth and the Immediate Region, both of which experienced declines in the number of industrial buildings since 2007 (Figure 32). Everett's loss of roughly 1.7 percent of its industrial building inventory is slightly higher than that of Massachusetts as a whole, but somewhat less of a loss than the Immediate Region.

Figure 31: Inventory of Commercial Buildings, Change from 2007 (4th Quarter)



Source: The CoStar Group Inc.

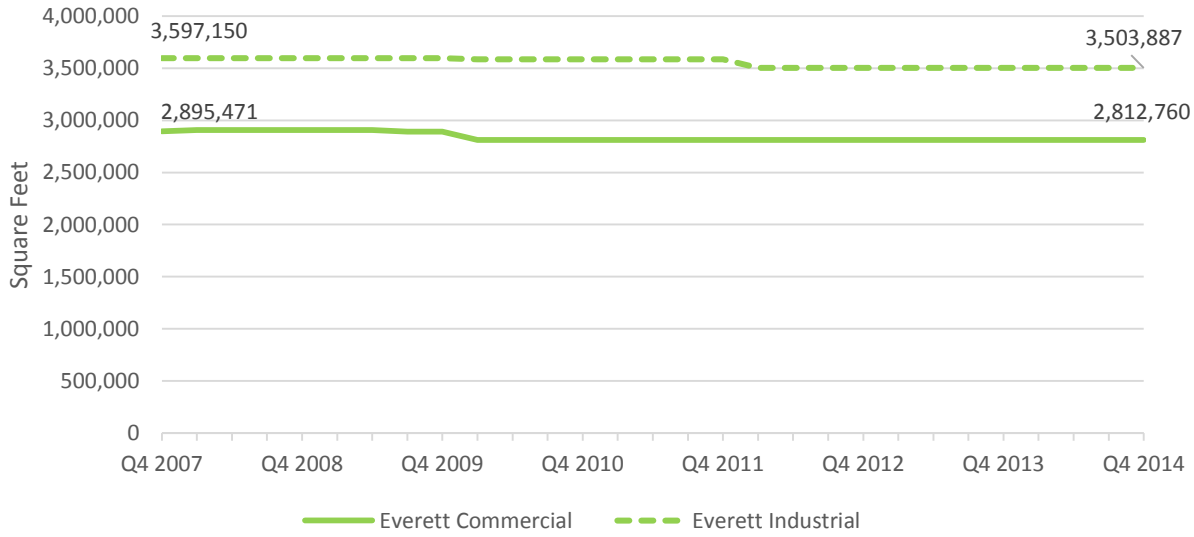
Figure 32: Inventory of Industrial Buildings, Change from 2007 (4th Quarter)



Source: The CoStar Group Inc.

Commerical and industrial buildings can vary dramatically in their size, so in addition to measuring change in the number of buildings it is also desirable to track the rentable building area (RBA) as a measure of changing inventories. Rentable building area is defined as the usable area in a geography's building stock including their share of associated common areas, expressed in square feet.

Figure 33: Everett, Rentable Building Area

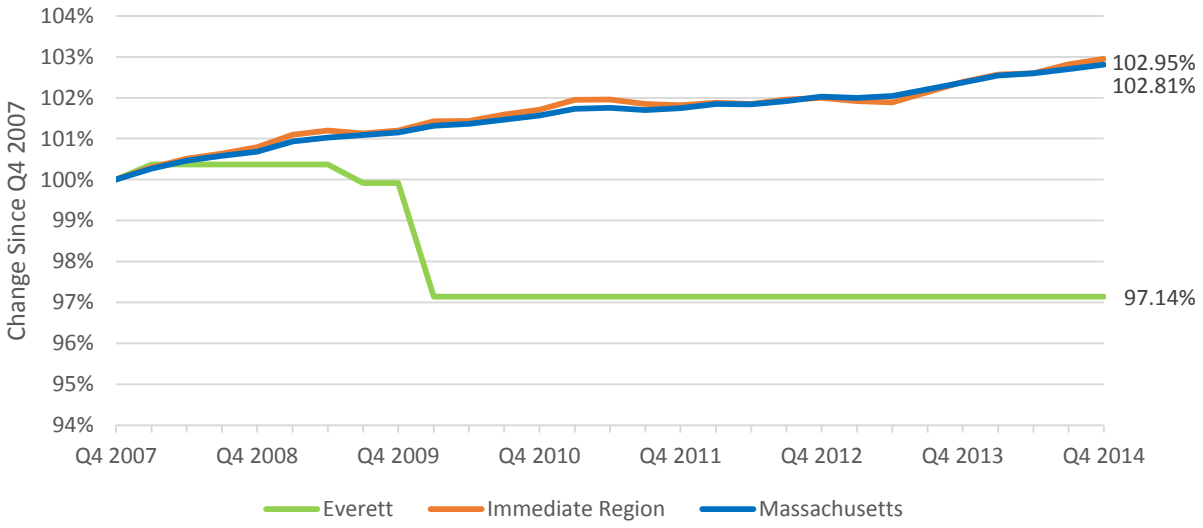


Source: The CoStar Group Inc.

Although there are more commercial buildings than industrial buildings in Everett, industrial buildings comprise a larger share of the city's rentable building area (RBA, Figure 33). As we saw with the number of buildings, both Everett's commercial and industrial RBA declined slightly from the fourth quarter of 2007 through 2014.

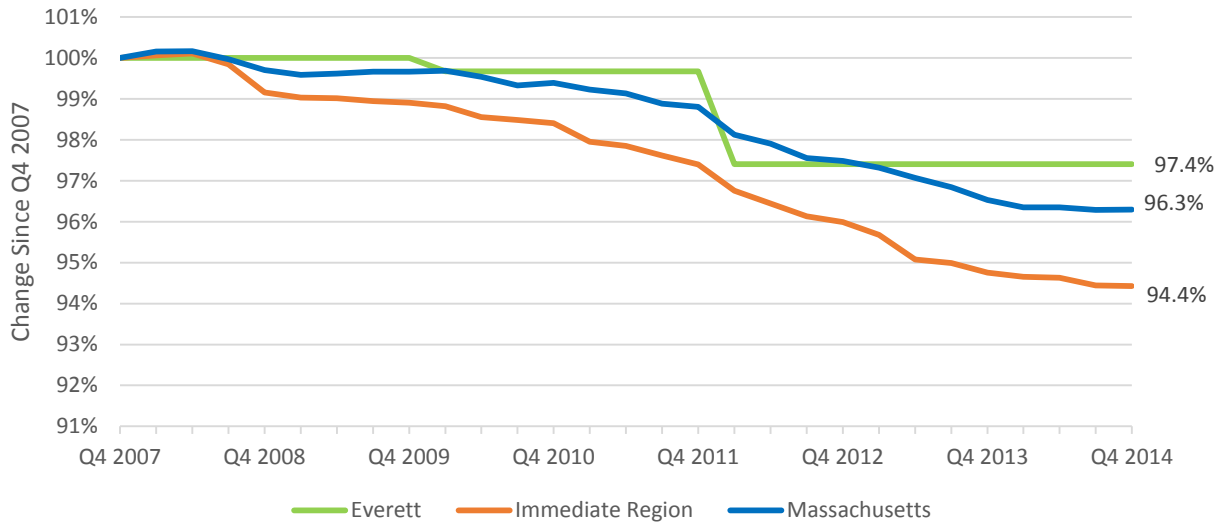
Unlike Everett, the state and Immediate Region have witnessed a steady increase in the amount of rentable commercial space and slow growth in the amount of rentable industrial space (Figure 34). For both state and region, commercial RBA has risen faster than the number of buildings, implying that new buildings are, on average, larger than incumbent commercial stock. The opposite is true for industrial buildings where growth in the number of new buildings far outpaces RBA (Figure 35). Thus, newer industrial buildings tend to be smaller than those built prior to 2008, commensurate with shifts to more streamlined manufacturing processes and inventory management techniques.

Figure 34: Commercial Rentable Building Area, Change from 2007 (4th Quarter)



Source: The CoStar Group Inc.

Figure 35: Industrial Rentable Building Area, Change from 2007 (4th Quarter)



Source: The CoStar Group Inc.

Surrounding Community Building Counts and Rentable Building Area

Table 6 summarizes changes in the number of buildings and RBA for Massachusetts, Everett, and those communities designated as official surrounding or neighboring communities by the Massachusetts Gaming Commission. Everett joins six of its neighbors in having experienced a decline in commercial building inventory. Only Chelsea and Revere experienced an increase and, in both cases, that increase exceeds the state average of 0.6 percent. Only Somerville saw no change in the number of commercial buildings. Everett also experienced a decrease in commercial RBA, as did Lynn and Melrose. The remaining communities all saw an increase in commercial RBA. This includes cities such as Cambridge, Lynn, Malden, Medford and Melrose that lost net commercial structures, but gained net commercial RBA. This suggests that existing commercial buildings have been expanded or that new, larger commercial buildings may have been built to replace smaller ones. Of the towns that experienced an increase in commercial RBA, all but Malden and Medford exceeded the statewide average of 2.8 percent growth. Chelsea experienced the greatest growth at 11.3 percent between 2007 and 2014.

In terms of industrial properties, Everett more closely resembles other area communities. Everett joins all of its neighbors, except Revere, in exceeding the 1.4 percent loss in building inventory experienced by the Commonwealth. However, among these communities, the rate of decline was slowest in Everett at 1.7 percent. Three communities (Cambridge, Melrose, and Somerville) experienced a dramatic decline (> 10 percent) of industrial structures since 2007. Likewise, most communities saw a net loss in industrial RBA over the study period. Revere is the sole exception, with close to no net change in industrial RBA since 2007. Of the communities losing industrial RBA, only Everett fell below the state average (2.6 percent versus 3.7 percent). In short, although Everett lost industrial RBA, this loss was relatively less than just about all other communities in the region. The losses of other communities range from 5.6 percent in Chelsea and Medford to 43.5 percent in Melrose from 2007 to 2014.

Table 6: Commercial and Industrial Building Inventory Summary, 2008 to 2014

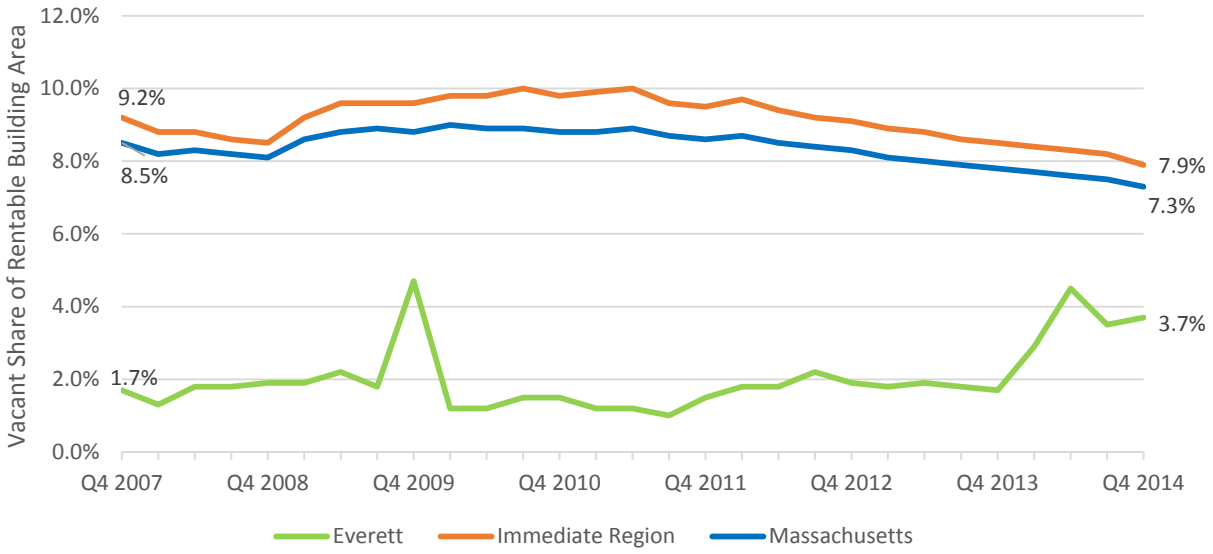
Inventory, Everett and Surrounding Communities, Q4 2007-Q4 2014	Commercial				Industrial			
	Number of Buildings (Q4 2014)	Percent Change, Q4 2007-Q4 2014	Rentable Building Area (Square Feet, Q4 2014)	Percent Change, Q4 2007-Q4 2014	Number of Buildings (Q4 2014)	Percent Change, Q4 2007-Q4 2014	Rentable Building Area (Square Feet, Q4 2014)	Percent Change, Q4 2007-Q4 2014
Massachusetts	**46,620**	**0.6%**	**942,748,021**	**2.8%**	**10,450**	**-1.4%**	**404,629,714**	**-3.7%**
Everett	227	-1.3%	2,812,760	-2.9%	116	-1.7%	3,503,887	-2.6%
Surrounding Communities								
Boston	4,412	-0.5%	166,326,532	4.0%	643	-7.9%	20,165,834	-12.8%
Cambridge	1,007	-3.4%	37,847,840	4.9%	73	-18.0%	2,039,706	-28.3%
Chelsea	172	3.6%	3,086,242	11.3%	80	-3.6%	2,695,088	-5.6%
Lynn	378	-0.5%	4,648,220	-1.2%	68	-2.9%	2,157,394	-6.7%
Malden	280	-0.4%	4,648,392	0.1%	83	-4.6%	2,169,717	-6.4%
Medford	216	-1.4%	4,355,898	1.9%	76	-9.5%	2,066,313	-5.6%
Melrose	100	-2.0%	911,182	-1.4%	11	-15.4%	141,437	-43.5%
Revere	236	1.3%	3,128,601	5.1%	27	0.0%	1,279,793	0.0%
Somerville	380	0.0%	6,277,174	8.6%	88	-13.7%	2,459,586	-17.3%

Source: The CoStar Group Inc.

Vacancy and Absorption

Our next set of metrics illustrate how available space is being utilized. The vacancy rate is the percentage of rentable building area (not buildings) that are not currently in use.[xiii] Everett's commercial and industrial vacancy rates are much lower than the statewide average (Figure 36). Everett's commercial vacancy rate rose from 1.7 percent in the fourth quarter of 2007 to 3.7 percent in the fourth quarter of 2014. Despite having more than doubled in this period, Everett's commercial vacancy rate is still less than half that of Massachusetts and the Immediate Region, suggesting a very intensive use of commercial space in Everett.

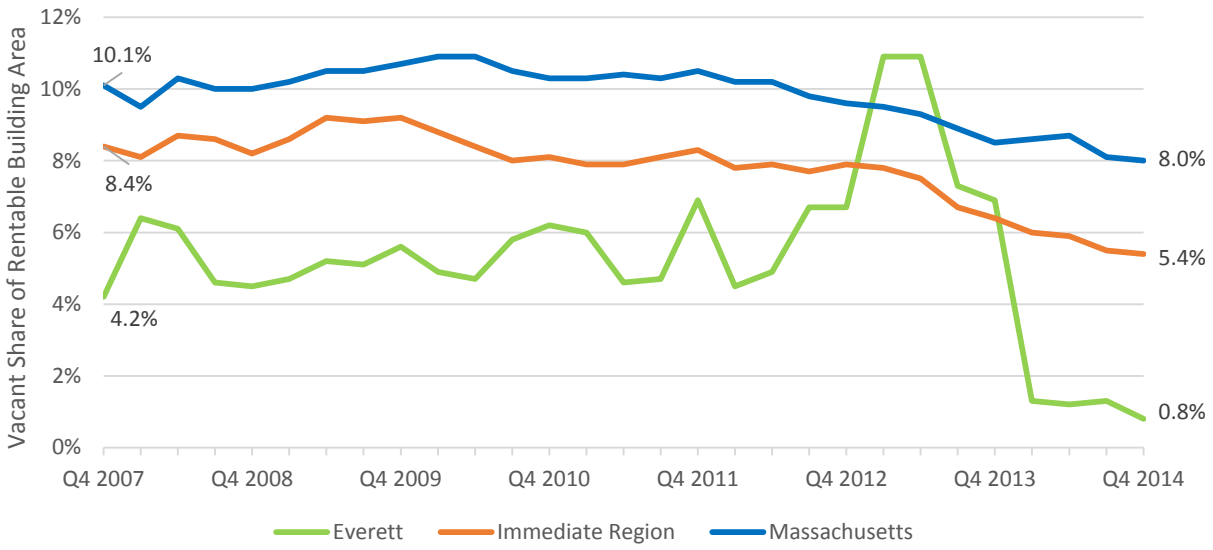
Figure 36: Commercial Vacancy Rates



Source: The CoStar Group Inc.

Everett's industrial vacancy rate has been more volatile, but has remained lower than that of the Immediate Region and Commonwealth since 2008 (**Error! Not a valid bookmark self-reference.**). While Everett's industrial vacancy rate briefly spiked to 11 percent in early 2013, it dropped precipitously down to less than one percent by the end of 2014. The purchase of a large amount of industrial space to serve as the distribution center for a large craft beer distributer may have heavily contributed to this drop. By the end of 2014, Everett's industrial vacancy rate was much lower than that of the Immediate Region (5.4 percent) as well as that of Massachusetts (8.0 percent).

Figure 37: Industrial Vacancy Rates

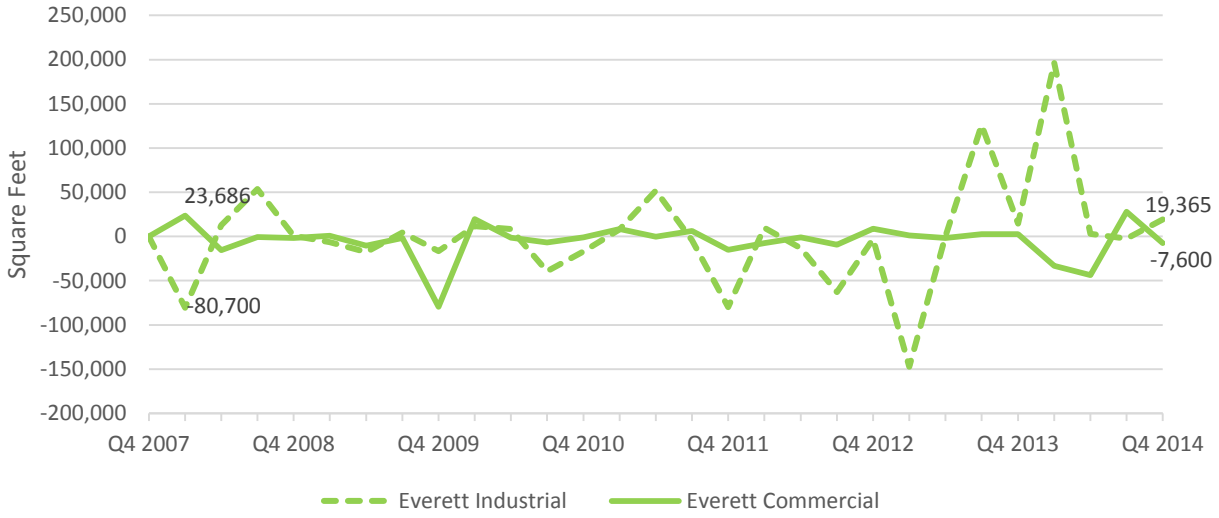


Source: The CoStar Group Inc.

We complement our analysis of vacancy by examining net absorption. Net absorption is the net change in occupied RBA from one period to the next. Net absorption captures changes in the market that may not be detected by the vacancy rate alone. For example, a vacant building that is taken off the market will lower the vacancy rate, but not net absorption. Net absorption is reported quarterly, so each point reflects the net change in occupied RBA from the previous quarter. If there was no change from the previous quarter, quarterly net absorption is zero.

For most of the study period, there was very little change in Everett's occupied RBA from one quarter to the next (Figure 38). That all changed beginning in 2012, when industrial net absorption became considerably more volatile, reflecting a more dynamic economy. By contrast, commercial net absorption has remained steady. This is somewhat expected as Everett's industrial profile is comprised of fewer, but notably larger buildings, than its commercial building stock. Everett's exceptionally low commercial vacancy rate may also indicate pent-up demand, such that any newly available commercial space is almost immediately gobbled up.

Figure 38: Everett, Net Absorption of Commercial and Industrial Space

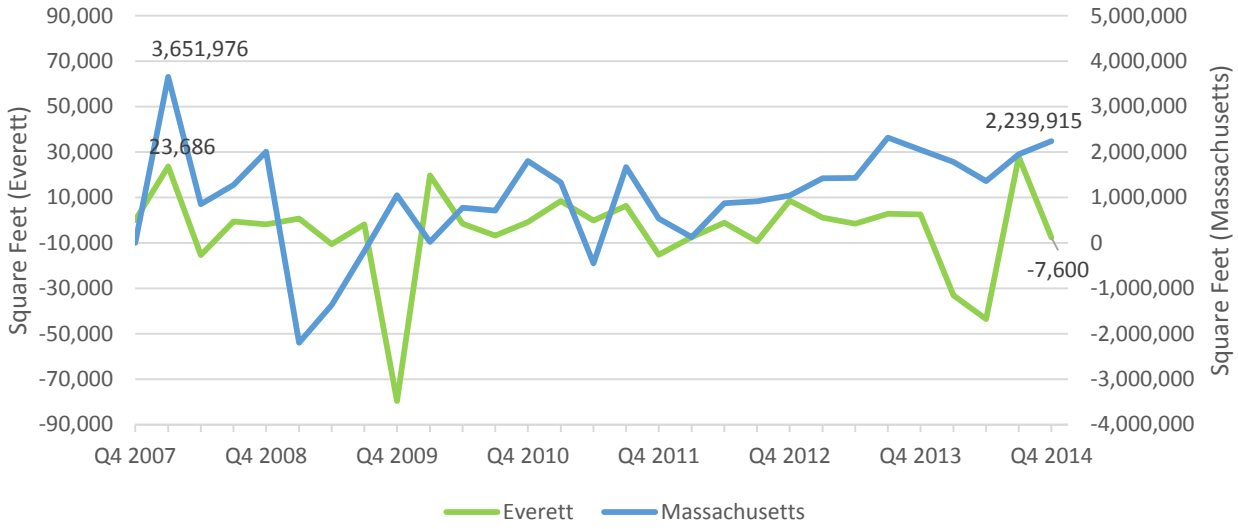


Source: The CoStar Group Inc.

Figure 39 and Figure 40 compare Everett's commercial and industrial net absorption, respectively, to the state as a whole. Even with the dramatic differences in the size of the changes, it is clear that the trend of Everett's net absorption differs from that of Massachusetts. In the seven-year period presented, Everett's commercial net absorption was negative in all but four quarters, meaning that for most of that time Everett lost more occupied RBA than it gained. Over the entire study period, Everett lost a net of 136,365 square feet of occupied commercial RBA. In contrast, Massachusetts had a positive net absorption for 26 of the 28 quarters observed. Over the seven-year period, Massachusetts leaseholders rented 28,970,307 more square feet of occupied commercial RBA over what it had before the first quarter of 2008. Despite Everett's majority of negative growth quarters, the city's commercial net absorption over the same period was only -15,962 square feet, a small percentage of their total commercial RBA. This was largely due to a few quarters of dramatic growth and only one quarter of dramatic loss.

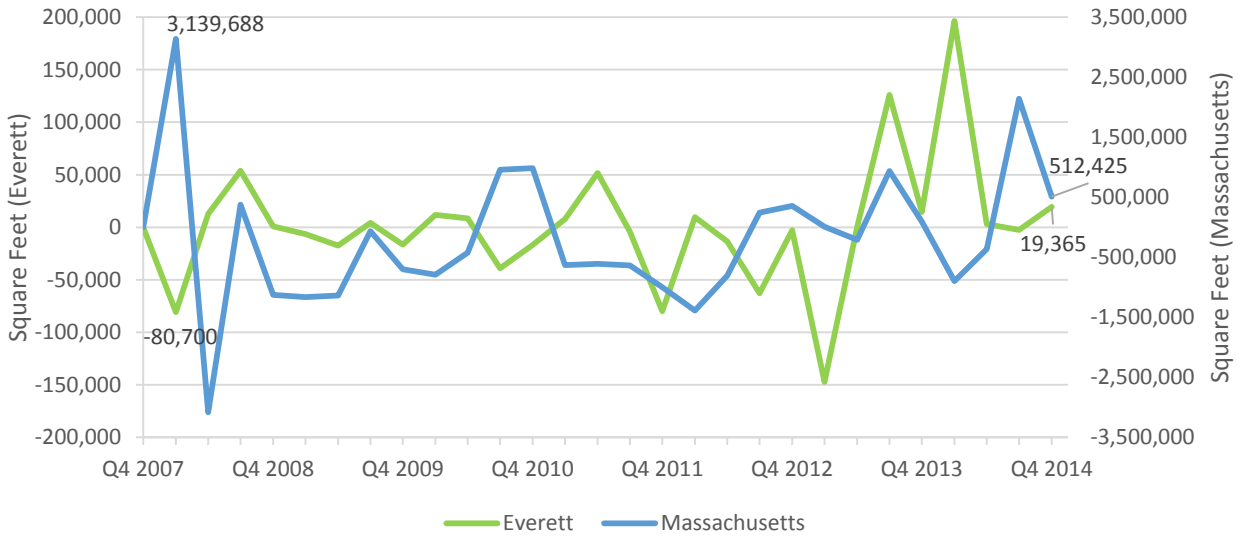
Everett does slightly better than Massachusetts in terms of industrial net absorption (Figure 40). Everett had 15 quarters of positive net absorption out of 28 versus 11 positive quarters in Massachusetts. The total net absorption in Everett over the seven-year period sums to a gain 30,434 square feet of occupied RBA, while Massachusetts experienced a loss of 5,300,347 square feet.

Figure 39: Commercial Net Absorption, Everett vs. Massachusetts



Source: The CoStar Group Inc.

Figure 40: Industrial Net Absorption, Everett vs. Massachusetts



Source: The CoStar Group Inc.

Surrounding Community Vacancy and Absorption Rates

Table 7 compares the commercial and industrial vacancy rate and net absorption in Everett to official surrounding communities, as identified by the Massachusetts Gaming Commission. For both commercial and industrial properties, Everett's vacancy rate is much lower than most of its neighbors and Massachusetts as a whole. In terms of commercial real estate, only Melrose has a vacancy rate as low as that of Everett (both are at 3.7 percent). Everett experienced a negative net absorption, as did Lynn,

Malden, and Medford, suggesting that commercial space in these communities is being less intensively utilized than it was at the end of 2007. All of the other communities experienced positive net absorption over the same time period. In terms of industrial real estate, Everett's vacancy rate of 0.8 percent is the lowest among area communities and one-tenth of the state level. While Cambridge, Lynn, Melrose, and Revere all have very low industrial vacancy rates, most other surrounding communities in the area have substantially higher vacancy rates than that of Everett or Massachusetts. Everett is one of only two communities, the other one being Lynn, to experience positive net absorption from the end of 2007. As was the case in commercial real estate, this bucks the trend of the Commonwealth as a whole.

Table 7: Vacancy and Absorption, Everett and Surrounding Communities

	Commercial			Industrial			
Vacancy and Absorption, Everett and Surrounding Communities, Q4 2007-Q4 2014	Vacancy Rate (Q4 2014)	Percent Change, Q4 2007-Q4 2014	Net Absorption (Q1 2008-Q4 2014)	Vacancy Rate (Q4 2014)	Percent Change, Q4 2007-Q4 2014	Net Absorption (Q1 2008-Q4 2014)	Valassis Vacancy Rate, All Businesses, Q4 2014
Massachusetts	7.3%	-14.1%	28,970,307	8.0%	-20.8%	-5,300,347	16.1%
Everett	3.7%	117.6%	-136,365	0.8%	-81.0%	30,434	10.5%
Surrounding Communities							
Boston	6.6%	-10.8%	4,941,436	8.8%	-32.8%	-1,695,286	14.5%
Cambridge	7.1%	9.2%	1,448,128	1.9%	-34.5%	-757,858	11.3%
Chelsea	4.4%	-58.1%	373,020	15.2%	90.0%	-345,497	20.1%
Lynn	5.9%	-11.9%	-61,893	1.8%	-91.9%	323,610	13.7%
Malden	8.7%	61.1%	-125,042	4.4%	-36.2%	-86,845	8.7%
Medford	6.2%	59.0%	-16,637	6.2%	67.6%	-168,809	11.8%
Melrose	3.7%	-37.3%	6,935	2.1%	0.0%	-106,853	8.3%
Revere	5.4%	-43.8%	238,692	1.3%	44.4%	-4,957	10.7%
Somerville	8.9%	-12.7%	528,073	7.8%	77.3%	-576,484	20.0%

Notes: Vacancy rate is defined as the share of unused rentable building area. Net absorption is the net change in occupied space in a geography's rentable building area.
Data in this table are annual averages of quarterly data.
Source: The CoStar Group Inc., Valassis Lists

Table 7 also presents an alternative metric of vacancy rates from Valassis Lists that captures vacant properties that are off the market.[xiv] CoStar's vacancy rates only capture unoccupied properties that are still on the market. Commercial or industrial buildings that have been abandoned, or have otherwise been removed from the market are not included. By contrast, the Valassis vacancy rate measures the share of vacant addresses, but not the amount of vacant square footage. While the two are not directly comparable, taken together they help to provide a more complete view of vacancy in the host and surrounding communities.

Everett's Valassis vacancy rate is 10.5 percent, lower than the state average of 16.1 percent but roughly in line with many of the surrounding communities, which tend to fall between 8 and 12 percent. Only two communities, Malden and Melrose, have lower vacancy rates than Everett. Boston's vacancy rate is a bit higher, at 14.5 percent, while two communities, Chelsea and Somerville, stand noticeably above the state average.

Lease Rates

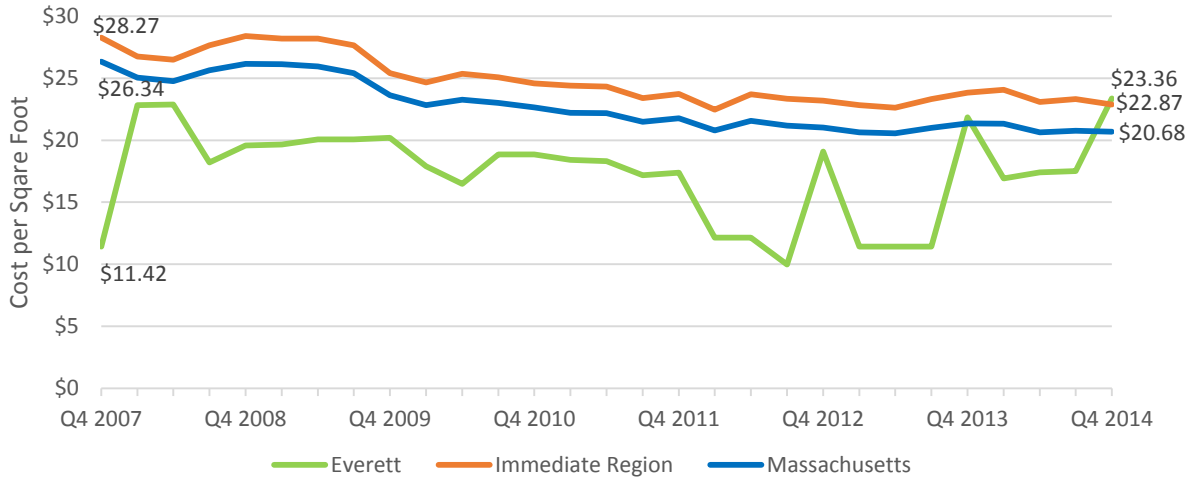
Price is a critical metric of real estate market conditions. Sales of commercial and industrial properties are rather rare and are highly variable in purchase price. This makes trends based on DOR L3 property sales too erratic to use for measuring impacts. Lease rates, by contrast, are a more common measure of market value. While a number of factors ultimately determine the price property owners charge for rental space, generally speaking higher lease rates indicate more desirable locations. However, there are a few caveats. First, owner-occupied commercial space is not included in the CoStar lease data. Second, individual buildings may possess characteristics that make them particularly valuable to certain types of businesses and organizations—complicating direct comparison. In this respect, the difference in lease rates between municipalities may say as much about the industry mix and business activities of those municipalities as it does about their relative economic health.

We provide separate analyses of lease rates for industrial and commercial uses. We further divide commercial real estate into office and non-office uses to account for differences in lease rates between the two.[xv] Office commercial real estate typically includes the offices of professional service firms, such as lawyers and doctors. Non-office commercial real estate includes restaurants, retail stores, sports and entertainment facilities, transportation facilities, and many other types of real estate.

Everett's office commercial lease rate was less than half of the rate of Massachusetts as well as the Immediate Region at the end of 2007 (Figure 41). However, Everett's lease rates have been rather volatile of late, especially since 2011. This is somewhat expected given the smaller number of office properties being observed. By the fourth quarter of 2014, Everett had an office lease rate slightly higher than either the Immediate Region or the Commonwealth. In the same period, both the Immediate Region and the Commonwealth experienced a downward trend in office rents. The degree to which the Commonwealth's office lease rates track that of the Immediate Region shows the degree to which the three county area designated as Everett's Immediate Region dominates the commercial office real estate market in Massachusetts.

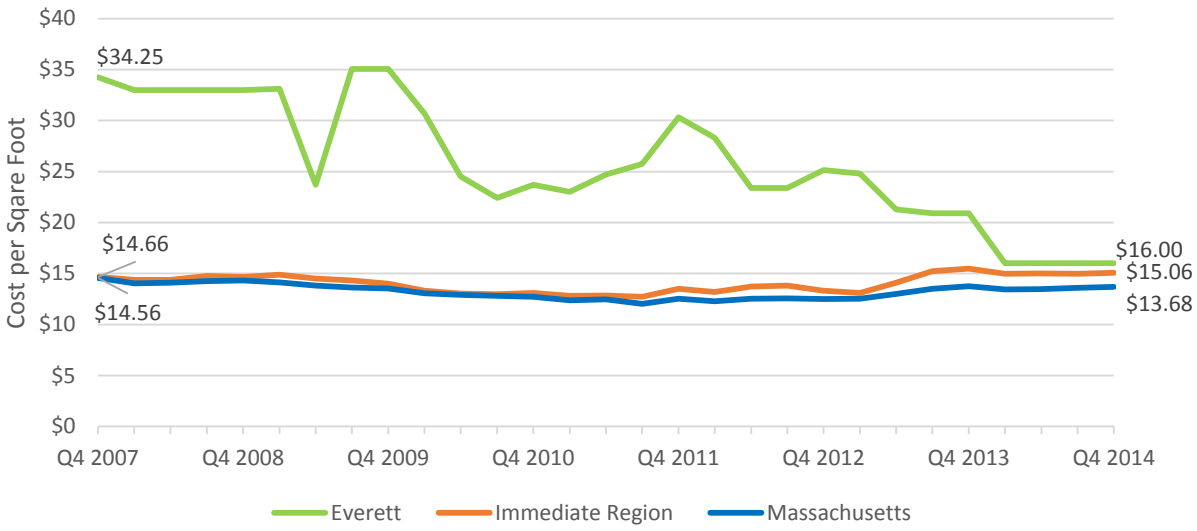
Everett's non-office commercial lease rates are typically higher and more volatile than the rest of the region and state, but have converged in recent years (Figure 42). Starting in 2013, non-office leases in Everett actually fell to just above the state and surrounding area. The difference between the relative value of Everett's office and non-office commercial lease rates, when compared to broader geographies, may result from Everett's small size and a relative scarcity of locations for retail stores and other commercial enterprises serving local consumer markets within Everett.

Figure 41: Office Commercial Lease Rates (2014 dollars)



Source: The CoStar Group Inc.

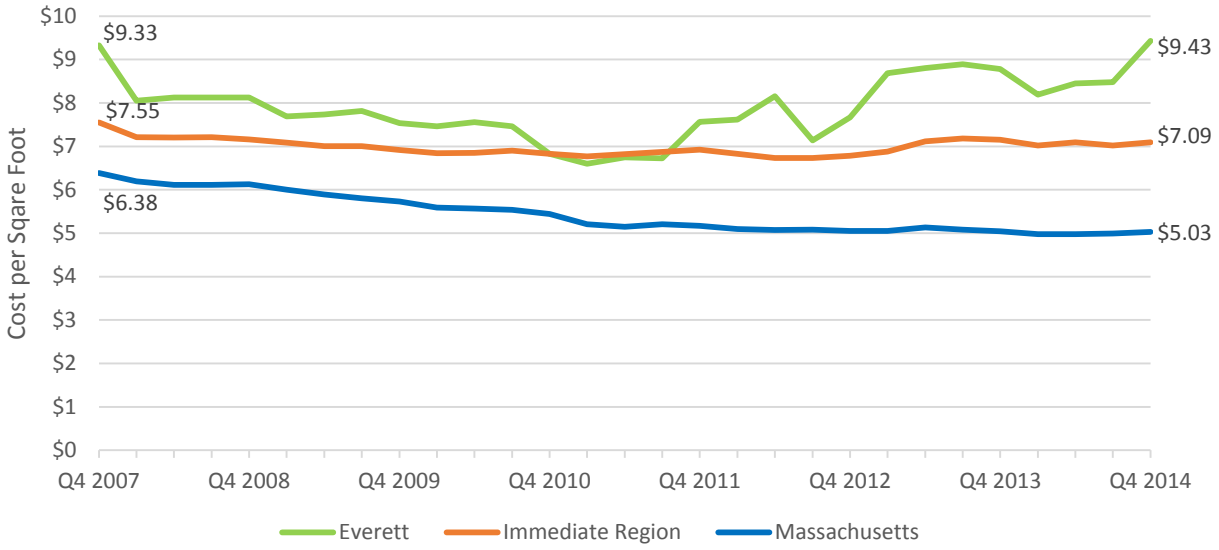
Figure 42: Non-Office Commercial Lease Rates (2014 Dollars)



Source: The CoStar Group Inc.

By contrast, Everett's industrial lease rates typically exceed both the Immediate Region and the Commonwealth as a whole. While prices declined slightly after 2008, since 2012 industrial lease rates in Everett have been climbing and are now more than two dollars per square foot higher than the regional average. This, along with Everett's very low industrial vacancy rate, suggests that Everett remains an attractive place for industrial activity.

Figure 43: Industrial Lease Rates (2014 dollars)



Source: The CoStar Group Inc.

Lease Rates in Surrounding Communities

The degree to which lease rates vary between Everett and its surrounding communities is indicative, not only of local market conditions but also the different types of commerce associated with different areas. Everett's lease rates exceed the state averages across all categories (office, non-office and industrial). The only other communities in the area for which this is true are Boston, Cambridge, Revere, and Somerville (Table 8). At $23.36 per square foot, Everett's commercial office lease rate is higher than all of its surrounding communities except for the much more expensive communities of Boston, Cambridge, and Somerville. For commercial non-office properties, Everett falls roughly in the middle of its peers, generally in the range of $14-$18 per square foot. Of the communities with available data (lease rate data for commercial non-office and industrial properties in Melrose was not available), only Chelsea fell below the state average for commercial non-office lease rates. Boston, Cambridge, and Somerville are also the clear outliers in terms of commercial non-office lease rates. Almost all of the communities in the surrounding region also have lease rates considerably higher than the state average of $5.03 per square foot. Of the communities for which data was available, Lynn alone did not significantly exceed this level. At $9.43 per square foot, Everett's industrial lease rate was higher at the end of 2014 than that of Boston, Chelsea, Lynn, and Malden, but lower than that of Cambridge, Medford, Revere, or Somerville. Revere has the highest industrial lease rate in the area, at $18.00 per square foot.

Table 8: Lease Rates, Everett and its Surrounding Communities (2014 dollars)

Area	Commercial Office		Commercial Non-Office		Industrial	
	Lease Rate Per Square Foot (Q4 2014)	Percent Change, Q4 2007-Q4 2014	Lease Rate Per Square Foot (Q4 2014)	Percent Change, Q4 2007-Q4 2014	Lease Rate Per Square Foot (Q4 2014)	Percent Change, Q4 2007-Q4 2014
Massachusetts	$20.68	-21.5%	$13.68	-6.0%	$5.03	-21.2%
Everett	$23.36	104.6%	$16.00	-53.3%	$9.43	1.1%
Surrounding Communities						
Boston	$30.89	-13.5%	$19.90	-13.6%	$8.80	0.1%
Cambridge	$48.31	-0.3%	$25.13	-4.6%	$9.91	N/A
Chelsea	$17.89	-33.7%	$9.57	-15.8%	$9.05	4.3%
Lynn	$15.07	-19.8%	$15.70	33.1%	$4.00	-32.5%
Malden	$20.25	3.9%	$17.96	20.7%	$8.46	2.8%
Medford	$18.34	-36.5%	$17.70	-31.5%	$10.75	-0.4%
Melrose	$18.83	20.3%	N/A	N/A	N/A	N/A
Revere	$20.82	-8.8%	$14.15	0.0%	$18.00	N/A
Somerville	$28.21	26.8%	$18.07	111.3%	$10.04	-28.6%

Source: The CoStar Group Inc.
Note: Data in this table is annual averages of quarterly data. CoStar data for Commercial Non-Office and Industrial lease rates in Melrose were not available, presumably due to the small number of both types of establishments within the town.

Endnotes

[i] Host community economic profiles can be found on the SEIGMA website at: https://www.umass.edu/seigma/node/172
[ii] Full 2014 data is not yet available for the all communities in Massachusetts or the Immediate Region, so we limit our analysis to the period from 2008 to 2014 with the intention of updating this information once the new data is available.
[iii] The data required for a detailed spatial analysis of development impacts also readily lends itself to more sophisticated forms of statistical modeling, such as hedonic regressions and interrupted time series analysis with spatial decay effects. We intend to pursue some of these more advanced methods once a sufficient time period has elapsed after the opening of the casino.
[iv] The location matching process involves joining the DOR L-3A database to GIS databases of individual parcels produced by MassGIS and the Boston Redevelopment Authority. These GIS databases are based on digitized parcel maps, which are linked to assessors' data, and can be used to identify the latitude and longitude coordinates of every matched parcel. The vast majority (roughly 98 percent) of all sales were located to parcels in this first round. The remaining sales were located through street address matching. Our final match rates were well in excess of 99 percent, an amazingly high match rate for this type of work.
[v] The hot spot analysis is based upon the kernel density estimation technique, which calculates the density of activity falling within 1 km of a fine grid of points across the entire study area.
[vi] Although we only examine sales for the entire 2008 to 2014 period as a whole in this report, similar forms of hot-spot analysis could be used to examine changes in the density of home sales over time. This might be useful to help document possible changes in the geography of home sales before and after the casino construction.
[vii] More specifically, we use a technique called Interpolated Distance Weighting (IDW) to estimate a smooth, continuous surface of property sales appreciation across the study region.
[viii] While expansive, detailed and timely, CoStar is not a representative sample as is the ACS. 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 do know that CoStar primarily lists rentals in multi-unit structures managed by property management services (i.e., apartment buildings) and likely misses rentals of single-family homes. This is not likely to be a major bias in communities, such as Everett, where multi-unit apartment buildings dominate the rental landscape although it is a concern for some of the outlying communities in the region.
[ix] For every individual community in Massachusetts, the Census Bureau reports the number of permits and their approximate value. However, the survey only covers residential permits, although it does distinguish single- from multiple-family permits distinguished by the number of individual housing units covered under the permit. These figures should be considered estimates, and not a complete count. Communities often do not report their permits, in which case the Census Bureau imputes (i.e. makes a statistical estimate of) the missing values using past values and other related variables.
[x] We measure the value of residential permits as the total value of permits divided by the number of units (not permits). This makes it easier to compare values when grossly different numbers of units are covered under a single permit.
[xi] For more information about CoStar Group Inc. and the CoStar database, please visit http://www.costar.com. The data used for this analysis is not available for download without a CoStar subscription.
[xii] CoStar Group Inc. updates their commercial real estate database on a daily basis. For this analysis conducted in 2015, UMDI is analyzing up to the last quarter of calendar year 2014.For the purposes of this analysis, commercial real estate is any real estate that CoStar defined as Office, Retail, Flex, Hospitality, Health Care, or Sports & Recreation. Industrial real estate is any real estate that CoStar defines as Industrial. These definitions were chosen to best approximate MA DOR classifications using CoStar real estate categories.
[xiii] Vacancy rates as calculated by CoStar may not take into account abandoned buildings which are not on the real estate market, so actual vacancy rates in distressed communities may be higher than those reported here.
[xiv] Valassis Lists is a direct mail marketing firm that supplies United States Postal Service vacancy data to the web-based mapping company PolicyMap.
[xv] CoStar's full definition of an office building reads as follows: "The primary intended use of an office building is to house employees of companies that produce a product or service primarily for support services such as administration, accounting, marketing, information processing and dissemination, consulting, human resources management, financial and insurance services, educational and medical services, and other professional services. Office buildings are characterized by work efficient floor plans, work areas, comfortable heating and cooling, cabling for phones and computers, and other conveniences that allow people conduct business. The interior finish and the structural design of the building supports the activities of the employees. Office buildings are typically configured for high-density use, with a ratio of people to square footage in the 150 to 300 or more range and less than 25 percent of the demised floor space allocated to industrial or retail use. Some physical characteristics of a building may assist in classifying the property as "office" if the property's use is not apparent."