# APPENDIX G:
# MARKET ANALYSES

# Technical Memorandum
## Chicopee West End Brownfields Study

Prepared by **FXM** Associates
October 2011

### Residential Market Analysis

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For the purposes of this analysis of potential demand for housing within the Study Area, the geographic market area is defined as a 20-minute drive time radius of the Chicopee West End/Downtown Project Area. This is the primary geographic area for attracting jobs and households, consistent with the empirical evidence of FXM's residential market assessments in other communities. For this geographic area, FXM used Nielsen-Claritas *SiteReports* subscription data for estimating the number of households by age of householder and income ranges in 2011 and projected to 2016. Claritas uses US Census and other data to estimate geospatially current year demographic characteristics – including number and type of households, age of householder, and income by age cohort – and projects these characteristics for a five-year period. Claritas is the most frequently used source of local demographic and business data by professional real estate and economic development analysts.

Next, FXM applied its proprietary *Housing Demand Model,* which incorporates data on mobility rates by age of householder, propensities to own or rent by age of householder, local market data on current and historical rental and sales prices, current and projected number of households by age and income, and the qualifying income standards of leasing agents and commercial lenders. These qualifying income standards are based on a 30 percent of income standard for gross rent and homeownership costs. Homeownership affordability includes estimated interest rates, local property taxes, and a 20 percent down payment requirement.

In this instance, neither single-family nor condominium sales are considered feasible for rehabilitation of existing space or new construction within the West End study area. Single-family homes are not a target potential for existing brownfields sites within the Project Area, and under current and foreseeable (3-5 years) market conditions and investor policies, the financing of condominium units is not feasible. Therefore, the target housing product is rental units.

Based on FXM's experience over the past several years in the rehabilitation and new construction of residential products within urban areas and downtowns in particular, the target markets are householders under age 35 and aged 55 to 74. These household types have been found to be least likely to have school-aged children – for whom a downtown location may not be suitable – and most likely to find the density, cultural/dining/shopping amenities and walkability of downtown areas most attractive.

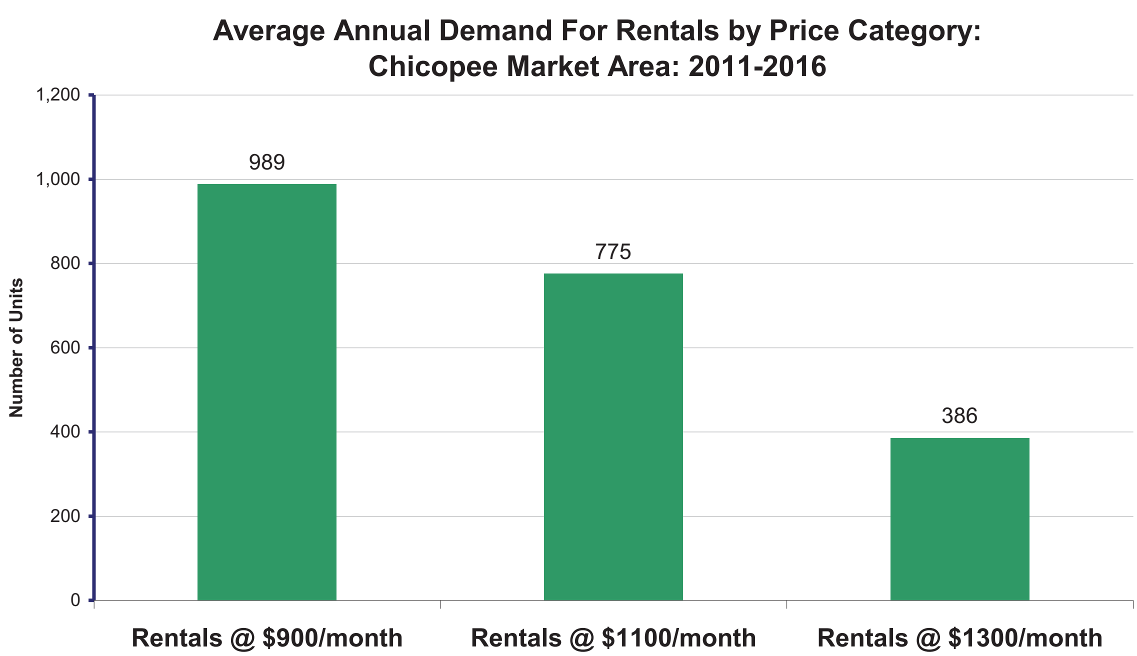
*Summary of Potential Demand*

**Figure A** summarizes estimated average annual demand for rentals by all household types with sufficient incomes to afford the estimated market-rate rental and sales prices shown in the chart. More specific estimates by age of householder and income cohorts for rentals are shown in subsequent charts. Rental demand represents the income-qualified households with propensity to rent, and it reflects mobility rates by age of householder applied to market area distribution of households by age. Average annual demand reflects the projected growth in number of households by income and age of householder between 2011 and 2016.

As shown by the data in **Figure A**, demand for rentals is expected to be nearly 1,000 units per year for rentals priced at $900 per month. About 80 percent of these households (775 per year) could also afford units renting at $1,100 per month, and 40 percent could afford to pay $1,300 per month (386 per year between 2011 and 2016). These demand numbers do not imply a demand for new construction, as they mostly reflect turnover within the existing supply rather than net new population growth.

The West End Project Area's ability to capture a significant share of this residential demand will depend on factors particular to specific development opportunities in the Project Area compared with potentially competitive projects elsewhere in the market area as well as the existing supply of both rental and sales units. For example, suitability of location, site features and unit amenities, competitive pricing, accessibility to jobs, permitting and approval requirements will determine the success of individual projects.

Figure A



*Demand by Age of Householder and Price Category*

**Figure B** shows average annual demand between 2011 and 2016 for rentals by price category and age of householder. By far, the greatest source of demand for rental units within the market area – and at each price category -- is expected to come from householders under age 35.

Figure B

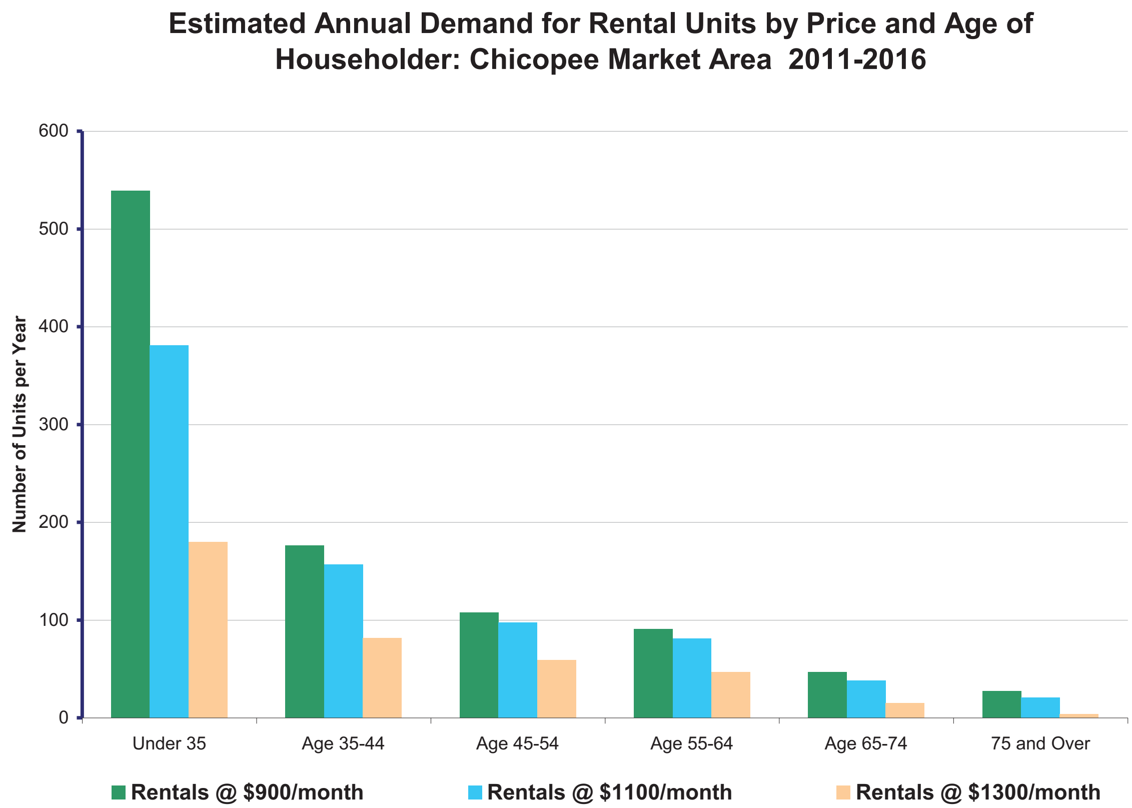
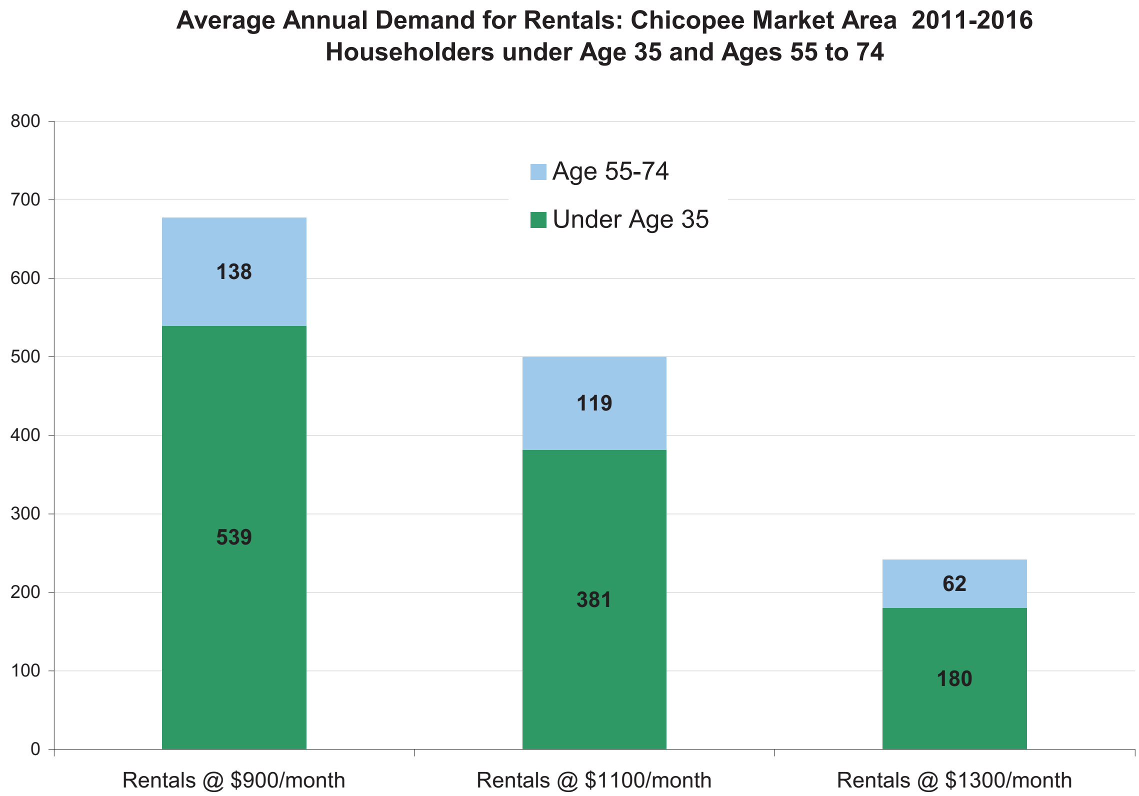



**Figure C** shows average annual demand for the target market segments – householders under age 35 and aged 55-74. Householders within these age groups account for 68 percent of the average annual demand by all householder types for rentals priced at $900 per month (see Figure A); 65 percent of the average annual demand by all householder types for rentals priced at $1,100 per month; and 63 percent of the average annual demand by all householder types for rentals priced at $1,300 per month.

Figure C



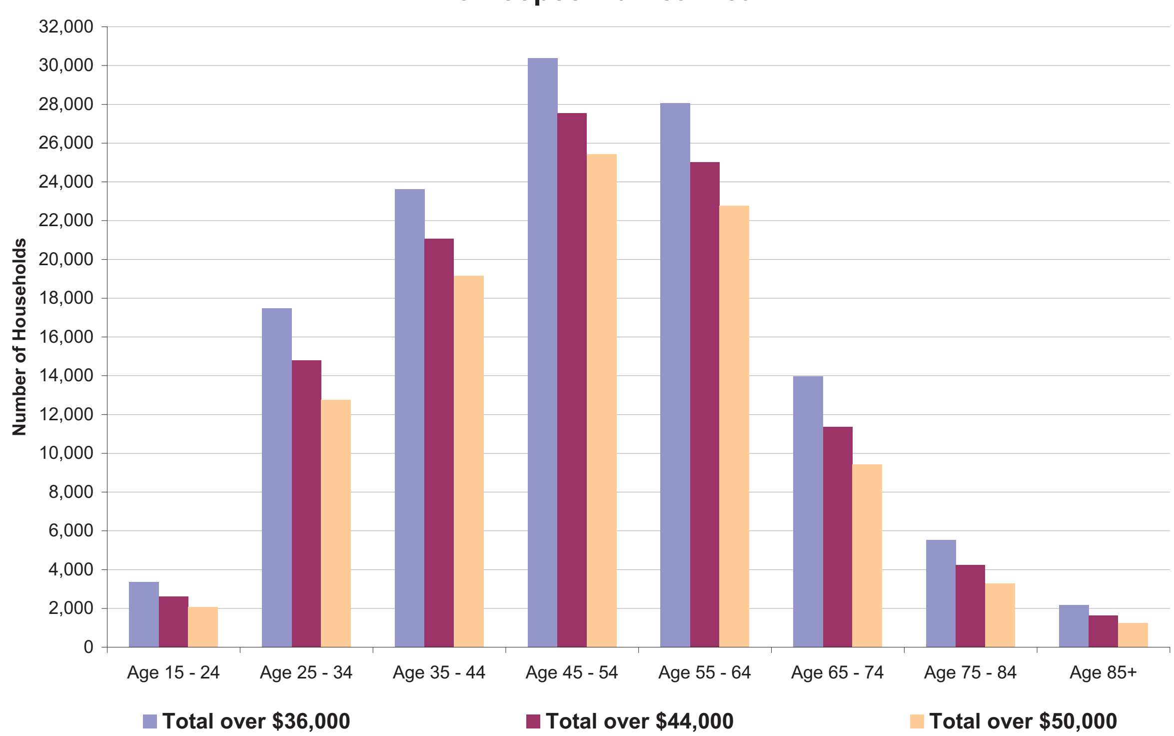

*Projected Growth by Market Segment*

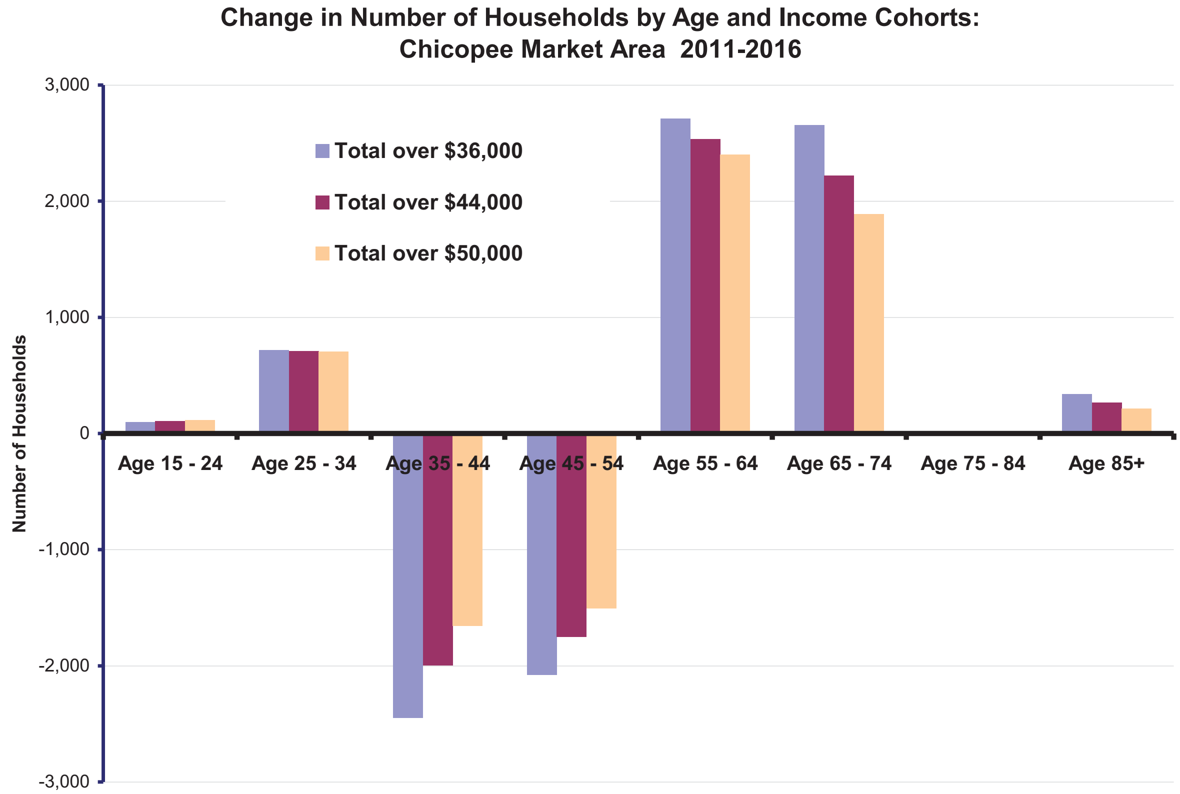
This analysis also determined that an annual household income of $36,000 is needed to afford $900 per month minimum market-rate rental price shown in previous charts. An annual household income of $50,000 would be sufficient to afford the $1,300 per month market-rate rental price presented in this analysis

The subsequent graphs display findings of the analyses inherent to the FXM *Housing Demand Model*. Of particular note is the last graph, “Change in Number of Households by Age and Income Cohort,” which shows an absolute decline in the number of householders aged 35 to 54 between 2011 and 2016 and a substantial increase in the number of householders aged 55 and 74 during that same period. This trend largely reflects the maturation of the “boomer” generation and the relatively lower number of younger households maturing into the former “boomer” age groups.

## 2011 Income by Age of Householder: Chicopee Market Area


## 2016 Average Income by Age of Householder Chicopee Market Area

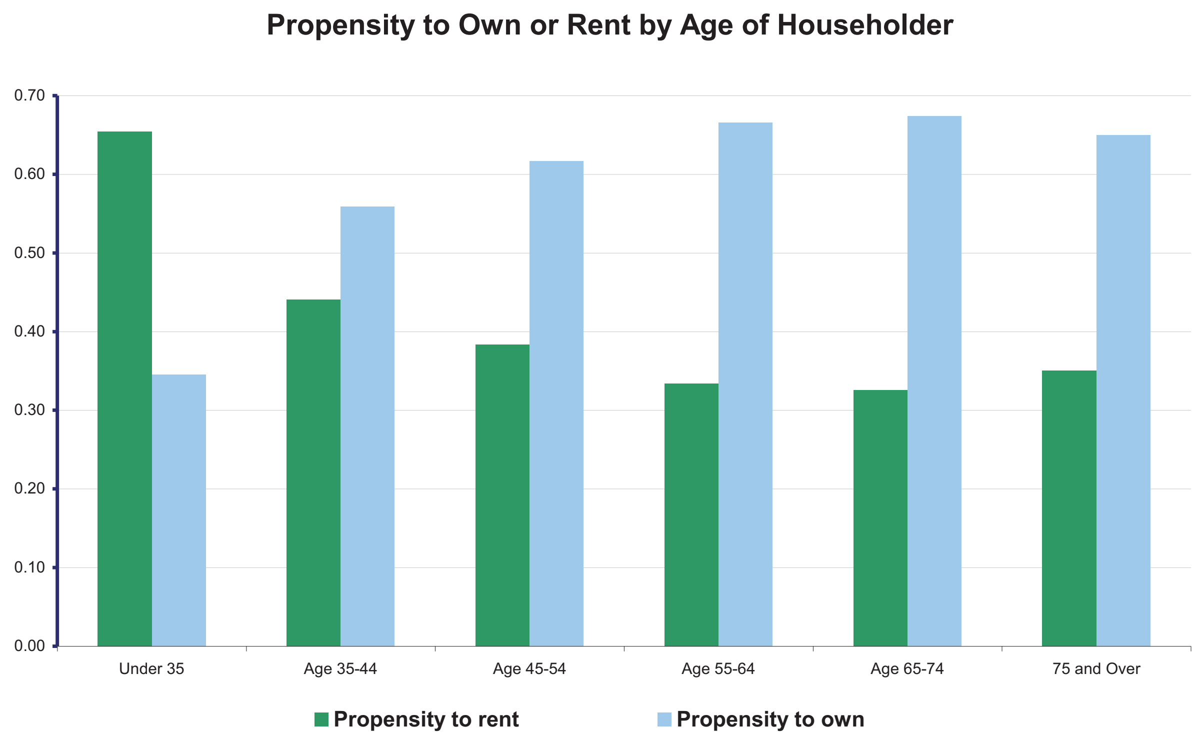


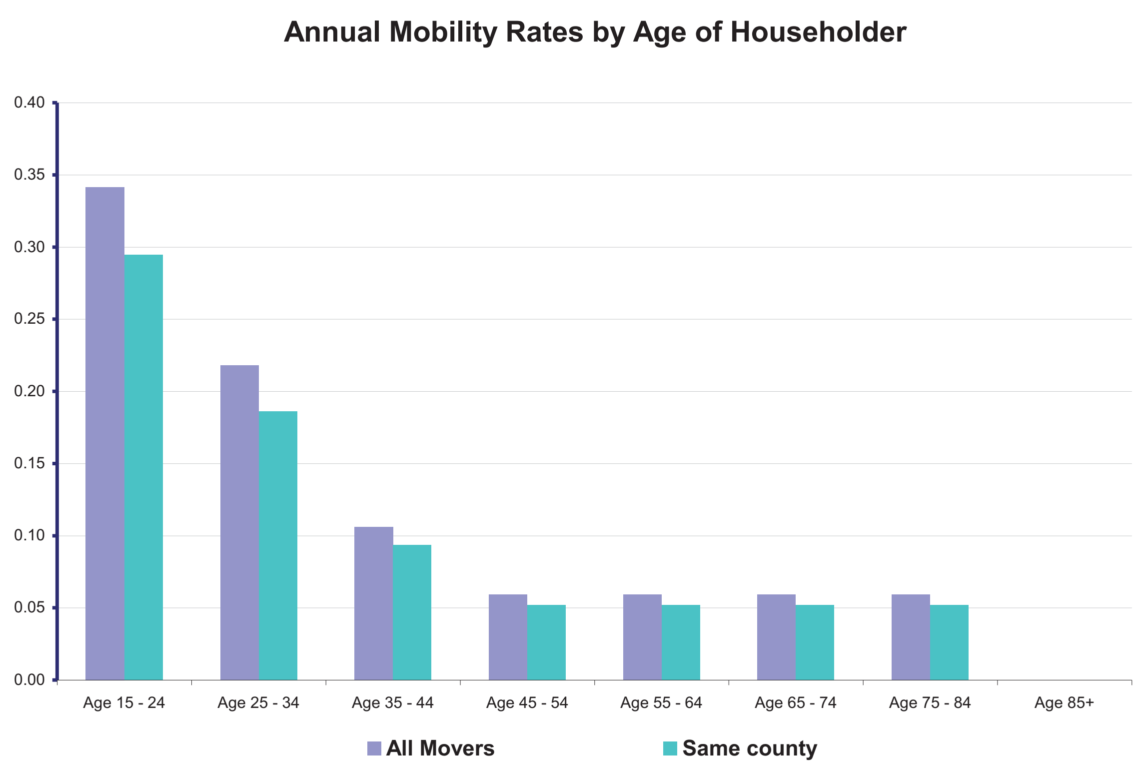



The final two graphs show propensities to own or rent by age of householder and mobility by age of householder. It should be noted that the most recent data on renting compared to homeownership by age of householder shows an increase from historical rent/own propensities in favor of rentals.

- Most analysts are predicting that this trend toward a higher proportion of renters is likely to continue, at least over the next five years, and the trend may further apply to older age groups, which have traditionally been more inclined to own rather than rent housing.

- Mobility rates have declined slightly in the past few years because of fewer job opportunities since the recession, but moves based on job changes comprise only a small proportion (less than 15 percent) of the reason households overall are changing housing.


Propensity to Own or Rent by Age of Householder
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Under 35
Age 35-44
Age 45-54
Age 55-64
Age 65-74
75 and Over
Propensity to rent
Propensity to own


Annual Mobility Rates by Age of Householder
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Age 15 - 24
Age 25 - 34
Age 35 - 44
Age 45 - 54
Age 55 - 64
Age 65 - 74
Age 75 - 84
Age 85+
All Movers
Same county

*Implications for West End Study Area*

Assuming that Chicopee could capture 30 percent of projected market demand within the 20-minute drive-time market area, and discounting currently planned and proposed residential development projects within that market area, average annual demand for residential rentals within the project area could be about 100 units per year. While the following in *not* a recommended development program for any specific site, the market analysis suggests that $900 is the low end potential gross rent that could be supported by a $120 per square foot cost for rehabilitation of existing buildings. Of the estimated 100 units per year average annual demand, 75 percent of target households could afford units priced at $1,100 per month, and 35 percent could afford units priced at $1,300 per month.

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## Commercial Market Analysis

To assess potential demand for office, industrial, and retail space within the West End Study Area, FXM Associates examined historical and projected trends in local and regional employment (see FXM Associates' Technical Memorandum: *Chicopee West End Study: Economic and Demographic Conditions and Trends,* September 12, 2011); contacted more than 25 individuals knowledgeable of local and regional economic development and real estate market conditions; assessed current and historical lease prices, total inventory, vacancies, vacancy rates and projected net absorption over the next three to five years for office, industrial/warehouse, and retail space within the regional and local markets.[1] In addition, FXM performed a Retail Opportunity/Gap Analysis to assess whether possible deficiencies in the supply of retail establishments serving 5, 10, and 15-minute drive-time consumer market areas of the West End might offer opportunities to attract new stores to the Study Area.

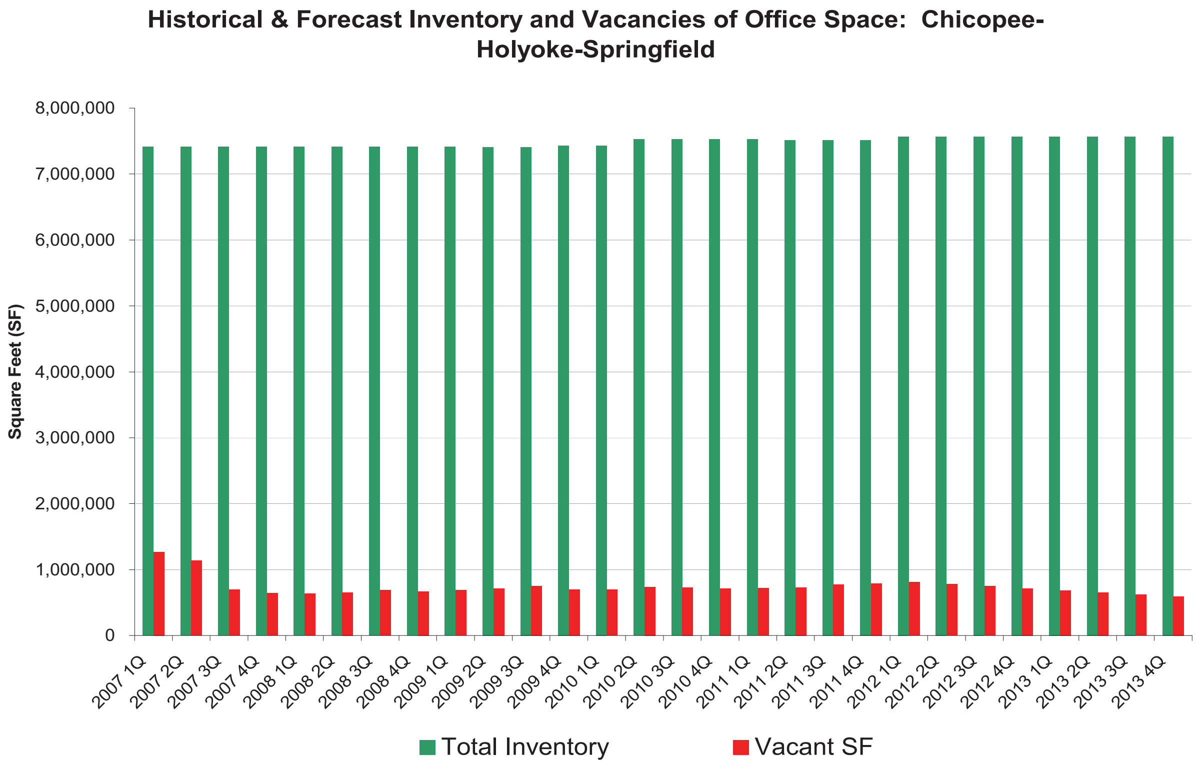
### Potential Demand for Office Space

As discussed in FXM's *Economic and Demographic Conditions and Trends* technical memorandum, the City of Chicopee overall lost an estimated 1,500 jobs between 2001 and 2010. The Pioneer Valley Planning Commission projects that the City overall will gain those jobs back plus roughly 400 additional jobs by 2035. An increase of roughly 2,000 jobs over existing employment would result in demand for about 600,000 to 1,000,000 square feet of commercial space over 25 years; roughly half of that demand would be in employment categories likely to require office space: 300,000 to 500,000 square feet over 25 years, or about 12,000 to 20,000 square feet per year on average. That level of net demand for space is very small, and it would include absorption of vacancies in currently built space.

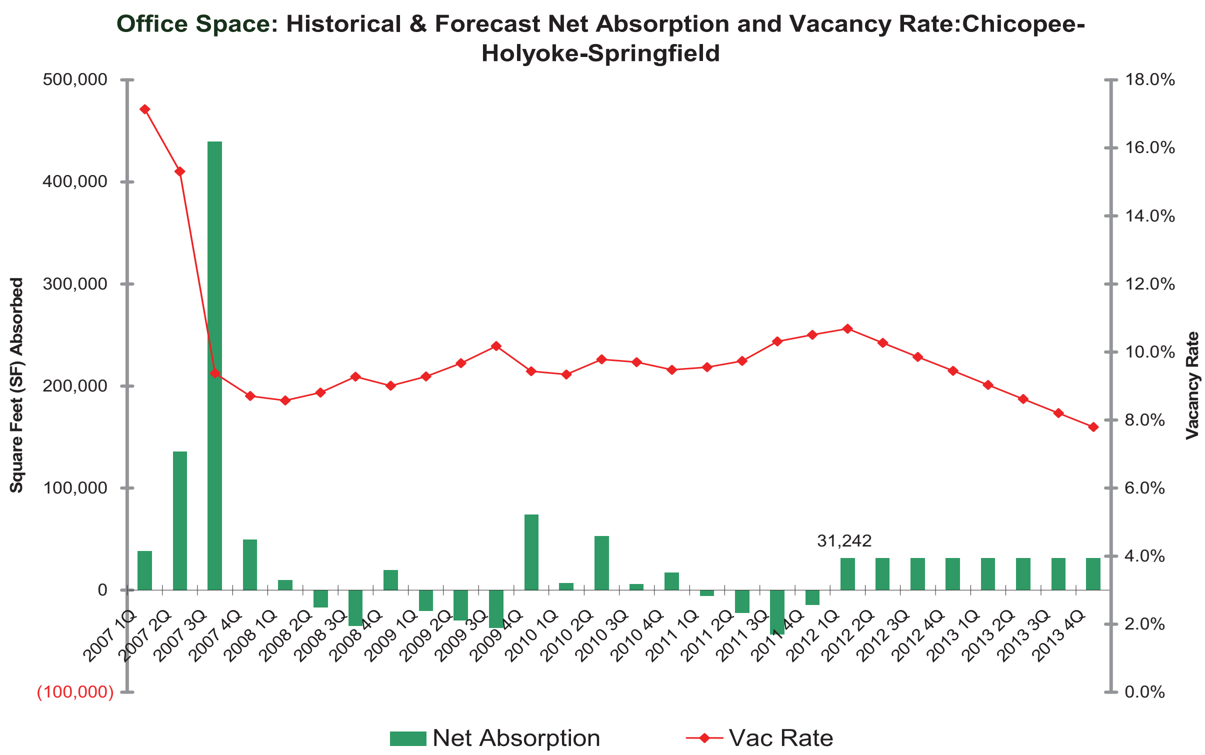
To more fully assess potential demand for office space - and based on discussions with local and regional commercial space brokers - FXM also analyzed the broader Chicopee-Holyoke-Springfield regional office space market. **Figure A** shows the historical and projected total inventory and vacancies in office space between the first quarter of 2007 and the fourth quarter of 2013. As shown by data in Figure A, no net additions to the regional supply of office space are forecast over this period. As shown by data in **Figure B**, however, Co Star data suggests net absorption of roughly 125,000 square feet of office space within the regional market each year, or 625,000 square feet over the next five years. Net absorption includes newly built or rehabilitated space minus demolitions as well as currently vacant space. The regional vacancy rate for office space is projected to decline to 8 percent by 2013, accounting for most of the projected net absorption.

[1] The principal source of these data is Co Star *Property Information Systems,* a proprietary subscription data service widely used by real estate and economic development analysts

# Figure A




# Figure B



The City of Chicopee overall currently holds about 5 percent of the Chicopee-Holyoke-Springfield regional office space inventory. At that same capture rate, net absorption of about 31,000 square feet would be expected in Chicopee over the next five years.

Given these market conditions and trends, to increase the amount of office space in the Study Area, extraordinary measures will need to be undertaken to increase the visibility of Chicopee's Downtown/West End area within the regional market (which includes the downtown areas of Holyoke and Springfield) and develop competitive product and price offerings for conventional and/or niche office space users. In several of the older downtowns in which FXM has worked, these specialty or niche users typically include small, entrepreneurial firms within the creative economy and professional and technical services. For these types of businesses, conventional office space may not be desired, and many value the draw of a location – such as the Downtown/West End area of Chicopee -- that includes walking distance to local retail and restaurant establishments; the ambience of older, historic structures and streetscapes; proximity to cultural and educational institutions; and other characteristics that offer a distinctive alternative to conventional suburban or strip commercial office space.

Lease rates for office space within the region currently average about $15.67 per square foot per year, and range from $4.50 to $32 per square foot per year. At the average lease rate, not including property acquisition or site preparation costs, the average lease rate would support about $80 per square foot new construction or rehabilitation fit out costs for refurbished office space.

**Potential Demand for Industrial Space**

**Figure C** shows the historical and projected total inventory and vacancies in industrial space between the first quarter of 2007 and the fourth quarter of 2013. The total inventory of industrial space in the region is about 25 million square feet, which is three times that of office space. As shown by data in Figure C, no net additions to the regional supply of office space are forecast over this period. As shown by data in **Figure D**, however, Co Star data suggests net absorption of roughly 322,000 square feet of industrial space within the regional market each year, or 1,600,000 square feet over the next five years. Net absorption includes newly built or rehabilitated space minus demolitions as well as currently vacant space. The regional vacancy rate for industrial space is projected to decline to 9 percent by 2013, accounting for most of the projected net absorption.

Chicopee currently holds 26 percent of the region's industrial space inventory. At the current capture rate, net absorption of about 435,000 square feet would be expected in Chicopee over the next five years. The average lease rate for industrial space in the region is $3.50 per square foot per year, arranging from $1.25 to $7.95 per square foot per year. At the average lease rate, not including property acquisition or site preparation costs, the average lease rate would support about $20 per square foot new construction or rehabilitation fit out costs for refurbished industrial space.

Figure C

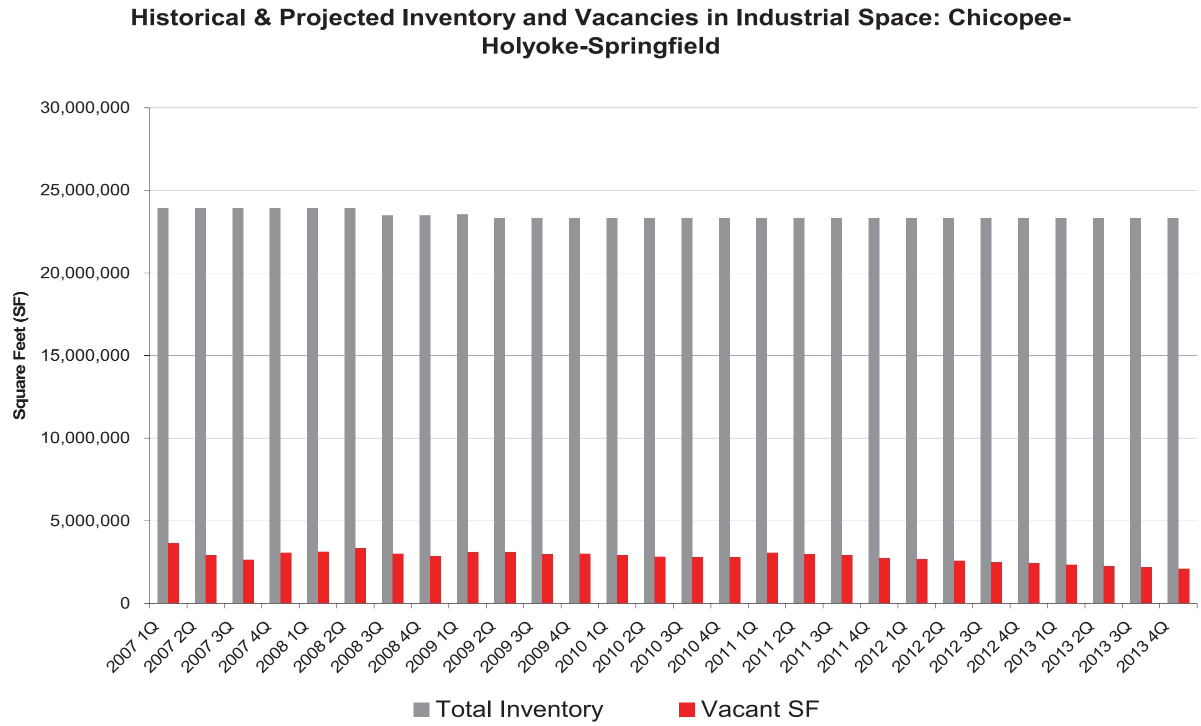
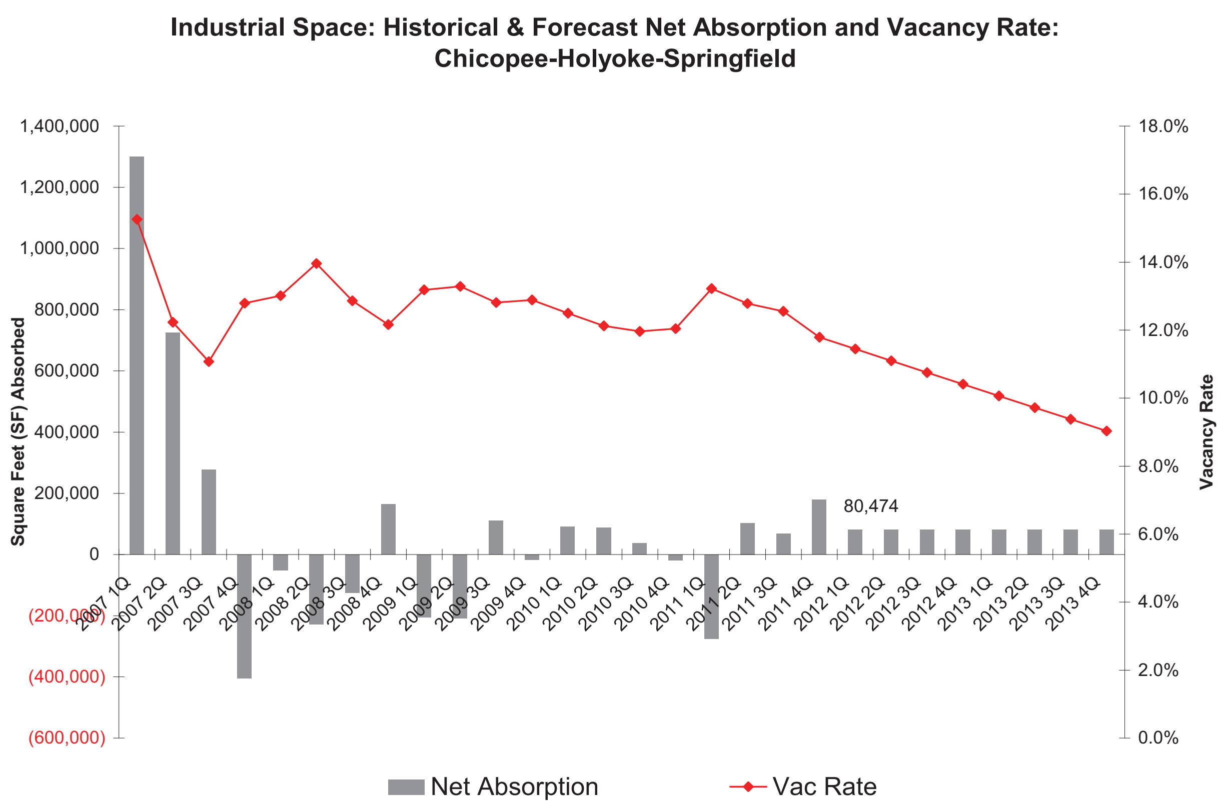



Figure D



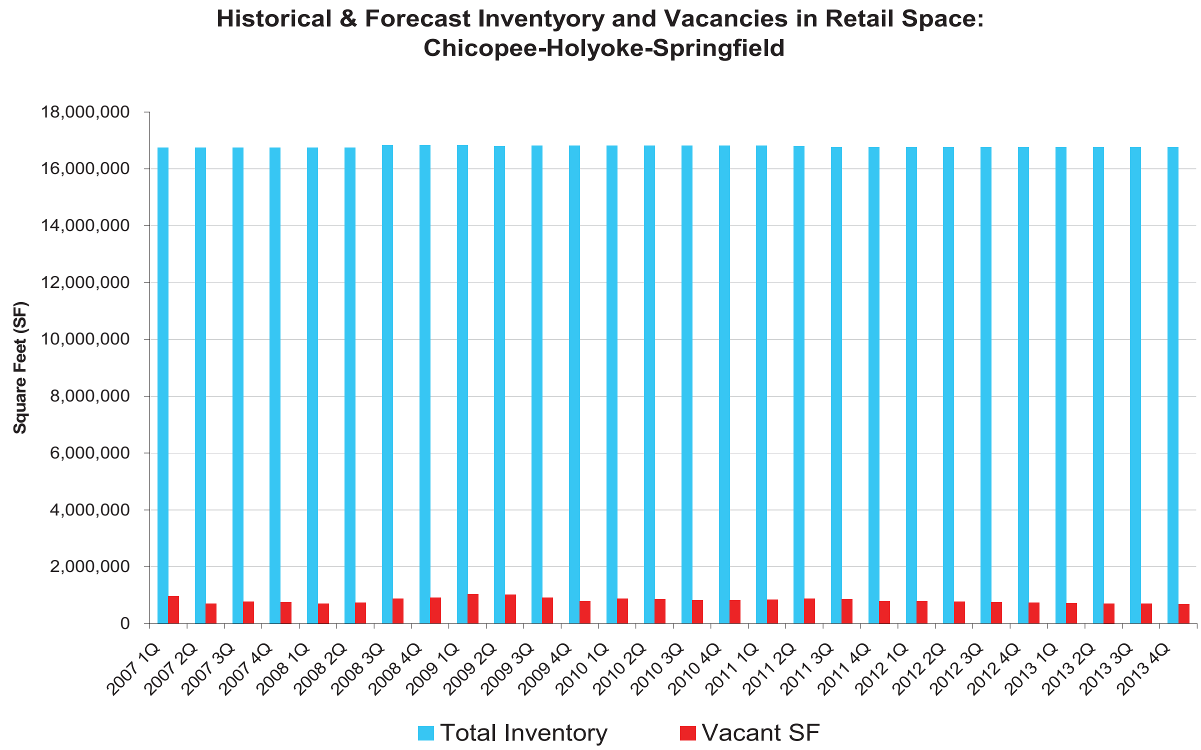
Consideration must be given to the potential for low-cost, flexible space in mill buildings as a means of increasing jobs and business occupancies in the West End Study Area. Typical users include a variety of creative economy, tech-based, advanced manufacturing, distributive, and other specialized businesses and entrepreneurs. Their basic needs are for low-cost, flexible space (with opportunities for expansion) in a building that has good light, is weather-tight, and meets other basic code requirements. The possibilities for incubator space – where some functions are shared among tenants – should also be explored. While information on the current tenants of mill space in the West End was not available to the consultants, it is likely that these types of users account for much of the current occupancy in the Lyman and Cabotville properties, where lease rates are in some instances lower than the regional average. Costs and flexibility are the key criteria for success, as is the need for a coordinated public-private outreach to attract prospective users who have and will continue to have options for low-cost space in the region.

**Potential Demand for Retail Space**

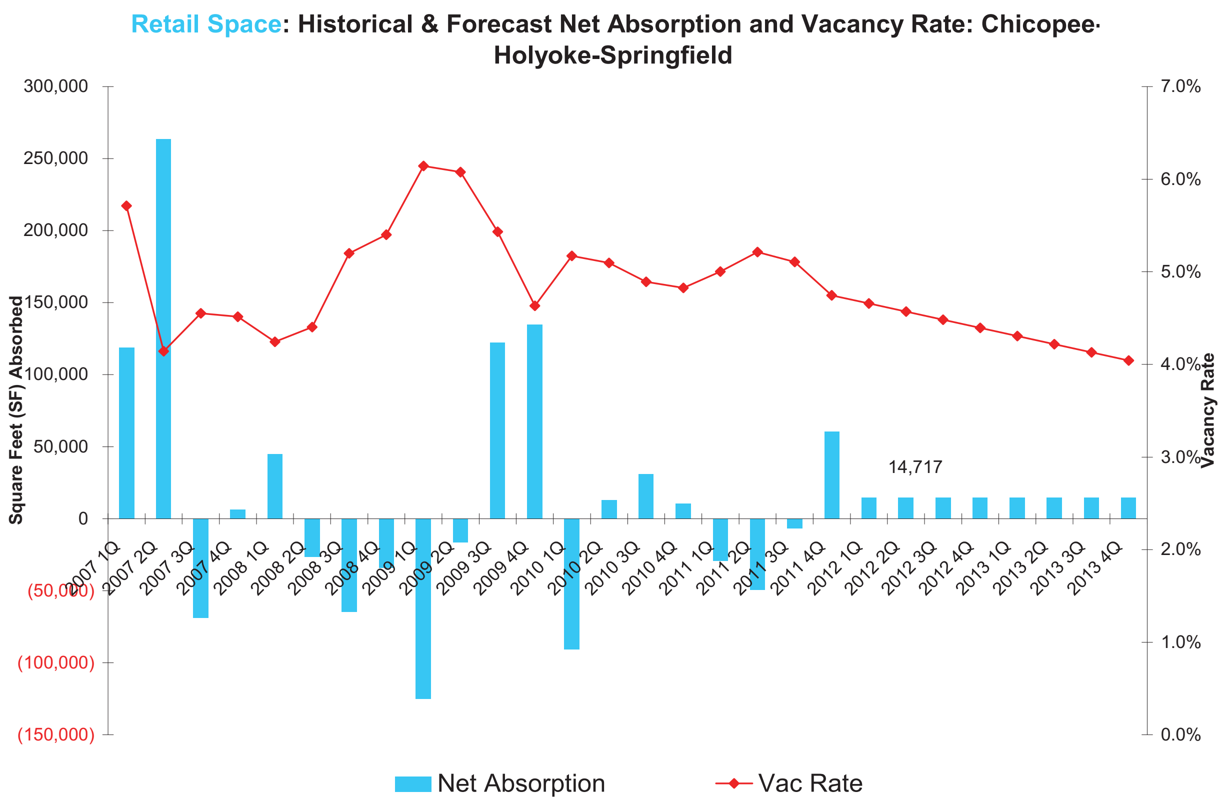
**Figure E** shows the historical and projected total inventory and vacancies in the regional supply of retail space between the first quarter of 2007 and the fourth quarter of 2013. The total inventory of retail space in the region is about 17 million square feet, with negligible change since 2007. As shown by data in Figure E, no net additions to the regional supply of retail space are forecast through the fourth quarter of 2013. As shown by data in **Figure E**, Co Star data suggests net absorption of roughly 59,000 square feet of retail space within the regional market each year, or 294,000 square feet over the next five years. Net absorption includes newly built or rehabilitated space minus demolitions as well as currently vacant space. That amount of projected net absorption is negligible from a regional perspective and reflects little growth in population or disposable income. The regional vacancy rate for retail space is projected to decline to 4 percent by 2013, accounting for most of the projected net absorption.

Chicopee currently holds 18 percent of the region's retail space inventory. At the current capture rate, net absorption of about 53,000 square feet would be expected in Chicopee over the next five years, or less than 11,000 square feet per year. As with the regional forecast, that amount of projected net absorption for Chicopee overall is negligible from a market demand perspective. The average lease rate for retail space in the region is $11.50 per square foot per year, arranging from $4 to $30 per square foot per year. At the average lease rate, not including property acquisition or site preparation costs, the average lease rate would support about $50 per square feet new construction or rehabilitation fit out costs for refurbished retail space.

## Figure E




## Figure F



*Retail Opportunity/Gap Analysis*

A Retail Opportunity/Gap analysis is a tool used by virtually all major retailers and chain restaurants to gauge market demand and competition within a specified geographic area. It represents a snapshot of the current expenditures of consumers within a geographic area and actual retail store sales matching those expenditures within the same geographic area.

The retail opportunity, or gap, analysis shows the potential demand for various types of retail development within a defined market area by comparing estimated household expenditures in a range of retail store categories with actual sales by stores in those categories. Where expenditures by households in the market area exceed sales, a gap or opportunity exists for stores within the market area to "capture" more of those household expenditures. Conversely, where market area household expenditures are less than actual sales in particular retail categories, stores in the market area already attract consumer dollars from outside the market area, and opportunities for additional retail development would be more limited. The retail gap analysis is a snapshot of current opportunities for retailers to newly locate or expand facilities based on a well-established empirical fact that people will purchase goods within the shortest available walking or drive time from where they live.

Retailers typically define market areas in terms of drive times, with a 15-minute drive time considered the maximum outside market area definition for all but the largest stores and store types. Market support within a 5-minute drive time is considered the outside drive-time reach of smaller retailers, and support within a 10-minute drive time is considered essential for most medium-sized stores and restaurants. If a specific category of retail sales opportunity were shown for a 5-minute drive-time market area and also held up at the 10-minute market area, then most retailers will consider market conditions favorable – from a demand standpoint – to locating a store within that market area. Data in **Table 1** summarize the analysis of retail development potential based on gaps between consumer demand and actual store sales within the 5 and 10-minute drive-time market area centered on the Downtown/West End Study Area.

Table 1
Retail Development Opportunities in the Downtown/West End Study Area Based on the Retail Opportunity Gap in 2010

| Selected Store Types-NAICS code | Consumer Expenditures | Retail Sales | Opportunity Gap | Median Sales per SF | Supportable SF | Median Store Size(SF) | Number of Stores | *Potential Capture (SF)* | *Potential Capture (# of Stores)* |
|---|---|---|---|---|---|---|---|---|---|
| Computer and Software Stores-44312 | $ 10,286,818 | $ 7,528,619 | $2,758,199 | $310 | 8,897 | 2,900 | 3 | 2,900 | 1 |
| Hardware Stores-44413 | $ 19,637,488 | $ 10,878,468 | $8,759,020 | $170 | 51,524 | 13,200 | 4 | 13,200 | 1 |
| Office Supplies and Stationery Stores-45321 | $ 13,006,612 | $ 6,366,676 | $6,639,936 | $245 | 27,102 | 10,500 | 3 | 10,500 | 1 |
| Gift, Novelty and Souvenir Stores-45322 | $ 10,575,696 | $ 5,158,703 | $5,416,993 | $145 | 37,359 | 4,000 | 9 | 4,000 | 1 |
| Other Miscellaneous Store Retailers-4539 | $ 30,855,602 | $ 20,200,151 | $10,655,451 | $250 | 42,622 | 2,300 | 19 | 11,500 | 5 |
| Limited-Service Eating Places-7222 | $ 107,751,722 | $ 105,414,103 | $2,337,619 | $260 | 8,991 | 2,000 | 4 | 4,000 | 2 |
| Special Foodservices-7223 | $ 21,079,291 | $ 14,441,266 | $6,638,025 | $250 | 26,552 | 1,500 | 18 | 6,000 | 4 |
| **TOTALS for Selected Opportunities** | $ 213,193,229 | $ 169,987,986 | $ 43,205,243 | | 203,046 | | 60 | 52,100 | 15 |

Source: Claritas *SiteReports,* 2011*;* Urban Land Institute, *Dollars and Cents of Shopping Centers;* and FXM Associates

As shown by the data in Table 1, there are limited but potentially important opportunities for expanding retail uses within the Downtown/West End Study Area. These seven store types emerge from the 75 specific consumer expenditure categories and matching store types analyzed as the ones currently (2010) showing a gap between consumer demand and actual store sales within the 5 and 10-minute drive time market areas. Even as both local and regional market growth is projected to be extremely limited (negligible net absorption of retail space is forecast), some retailers may find a location within the Study Area attractive because of the competitive advantage it offers in attracting certain types of consumer expenditures.

Caution must be taken in interpreting the results of a retail gap assessment. While demand is apparent for certain store types, some retailers rely on the level of pedestrian traffic generated in a shopping mall to garner a significant portion of their sales. The current mass of retailing in the Downtown/West End Study Area is well below that of a community-center sized mall or regional shopping center. Convenient parking is also essential, as are competitive rents and an attractive environment for daytime and evening shopping. The data shown in Table 1 can, however, be useful to property owners, brokers, and economic development professionals as part of a strategy to attract successful retailers within the region but outside the immediate market to locate an additional store or to expand within the Study Area. Smaller establishments do not typically have the resources to do a retail gap analysis on their own, and they may find the apparent competitive market advantage an inducement, especially when shown these data as part of a package of incentives that would include favorable lease rates – at least for initial years of operation – joint promotion and advertising opportunities, and a supportive political and private sector business climate.

The retail opportunity/gap analysis is also not meant to define the only opportunities for expanding retail uses in the Downtown/West End Study Area. A well-managed business with a successful retailing concept/product/service can succeed -- even where current store sales suggest that demand is already satisfied -- by out-competing its rivals. For example, an excellent restaurant – one that has quality food and service, variety in offerings, and responsive market pricing – could find the distinctive attributes of the Study Area and favorable lease terms attractive and could be successful by attracting customers from a broader geographic area as well as those now frequenting other existing restaurants.