

New Uses for Four Fire Stations

a report prepared for the City of Springfield

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Overview and Summary Conclusions



Decorative detail at the Oakland Street Station

Overview

The City of Springfield plans to divest four decommissioned fire stations and return them to productive use. This report was commissioned to support that goal. Achieving the goal requires *imagination* to see their potential, *capital* to fund the work, *labor* of all sorts to get the task done, and *new owners and occupants* to use, support and maintain the completed projects.

This report provides data and insights that can help the city and prospective owners identify and evaluate potential new uses for these four buildings. The work is arranged in the following manner:

- *Chapter 1* presents the stations in their neighborhood and zoning context.
- *Chapter 2* reports on the economics of the local and regional real estate market.
- *Chapter 3* describes six completed fire station renovations, most in older industrial cities like Springfield.
- *Chapters 4 and 5* deal with issues of zoning and building codes.
- *Chapter 6* presents development ideas for the four stations that appear viable based on information from the previous sections.
- *Chapter 7* examines available funding strategies
- An *Appendix* includes historic data forms, examples of reused fire stations in Springfield, funding sources, and an inventory of fire stations on the state historic register.

Summary Conclusions

Virtually all decommissioned fire stations eventually return to service, with new uses that include the gamut of real estate categories. The City of Springfield has kept these four fire stations secure from vandalism, preserving most original interior and exterior features. All four are well-built masonry structures, designed by well-known Springfield architects, and all are candidates for restoration and reuse. The two older stations are well-documented in the state preservation archives, with data sheets included in the appendix.

The Sumner Avenue and Page Boulevard stations are smaller and “newer”, dating from the 1920’s. They are well-suited for development by individuals or small businesses. Zoning

allows both commercial and residential uses at Page Boulevard, and restricts use to residential or live/work residential at Sumner Avenue.

The Oak Street and Oakland Street stations are larger, more complex architecturally, and older, dating from the late 19th century. They are suitable for development by groups of individuals, developers, non-profit organizations or small businesses. The Oakland Street station in Forest Park is commercially zoned and well-located for active retail, restaurant, entertainment or other public uses – with an upper level suitable for residential, office or educational activity. The Oak Street Station in Indian Orchard is residentially zoned and most uses will require some zoning relief. It would make a good home for residential uses, including multi-family and live/work space. It also has potential as space for artisans, small offices and other activities that can blend into the residential neighborhood.

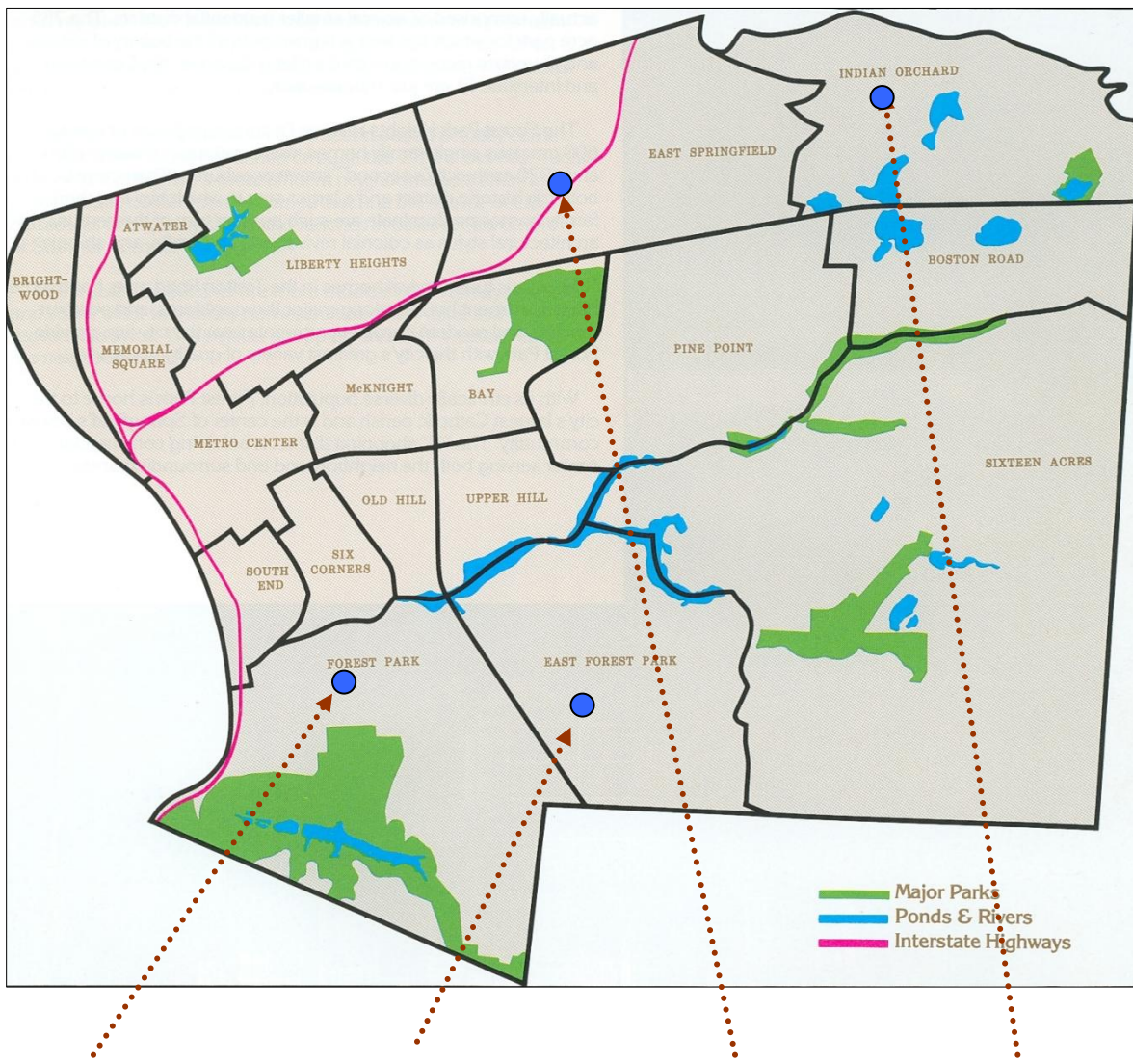
This report is intended to function as a spur to the imagination. Chapter Six includes diagrams, descriptions and financial analyses as a template for further investigation. The drawings and proformas are very preliminary and include enough detail to differentiate the schemes and to place them within the context of the local real estate market. The assumptions that govern the numbers are spelled out, and readers of this report who are in real estate, construction or development are encouraged to use them as a starting point for further investigation, not as firm or final estimates of value or cost.

Chapter Seven concludes with a discussion of funding sources that have been used to get similar projects off the ground and into productive use. The historic appeal of these buildings adds to their attraction as real estate and also opens the door to various financing tools. Many fire stations budgets have been augmented with historic, New Markets, and other tax credits, low purchase prices, long term leases and other public sector sources of financing.

Not to be overlooked is the potential for public, private and institutional investment that is not immediately reflected in appraised value, but which has positive benefits for the occupants and neighborhood. Reuse of these stations will entail the give and take that all development requires, with the public and private sectors both having roles to play.

1. Four Fire Stations: Context and Zoning

Springfield encompasses approximately 36 square miles, having grown outward from the Connecticut River, annexing several adjacent towns during its period of expansion. It is organized into neighborhood districts that evolved to have personalities, zip codes and mapped boundaries. The fire stations in this report span the city from east to west and north to south – in locations that vary from small-town Indian Orchard, to industrial East Springfield, inner-suburban East Forest Park, and central-residential Forest Park. The neighborhood, zoning, and nearby land uses are major determinants of successful reuse strategy.



Oakland Street Station
Forest Park

Sumner Avenue Station
East Forest Park

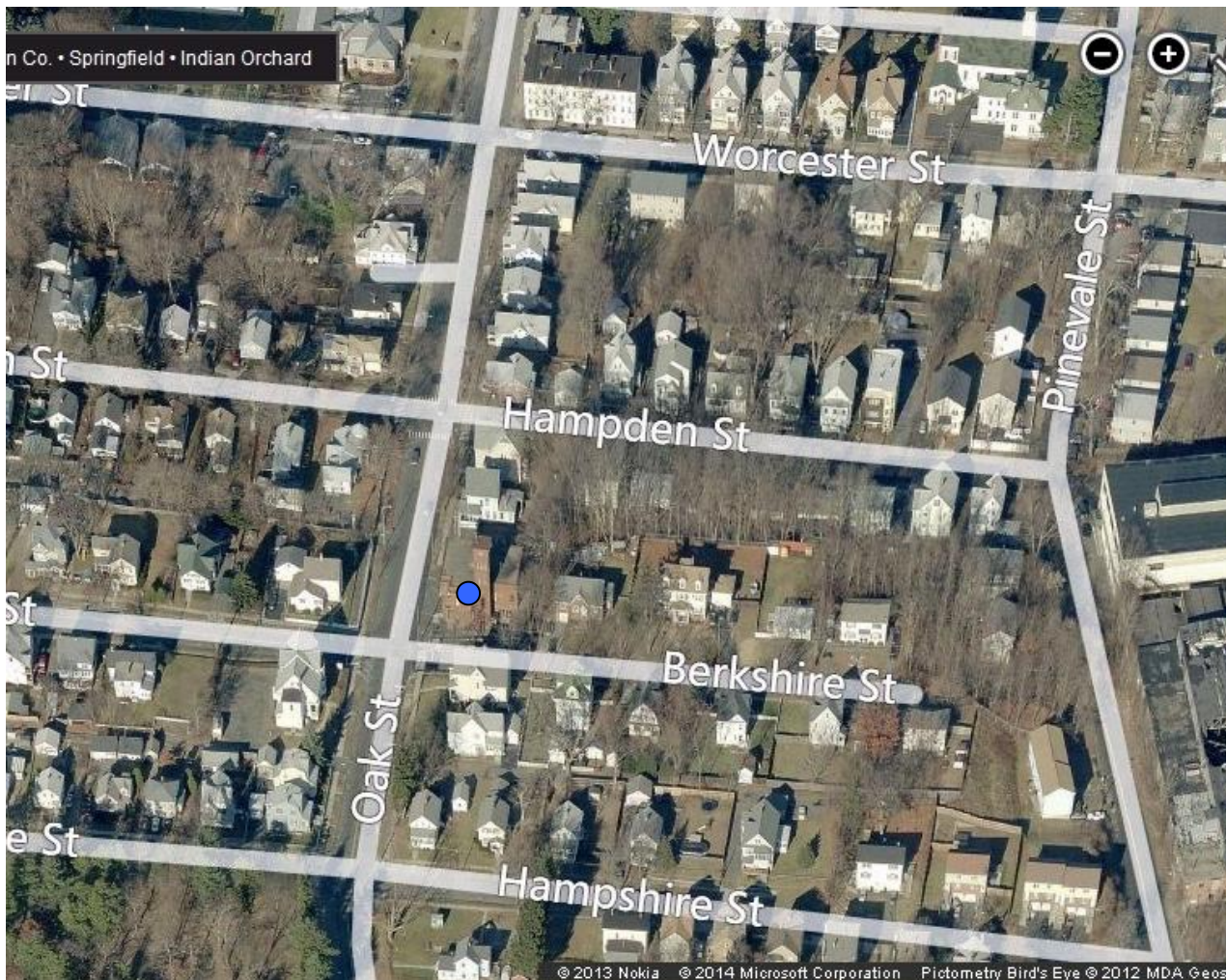
Page Boulevard Station
East Springfield

Oak Street Station
Indian Orchard

Oak Street Station: History, Context and Zoning



The Oak Street Station, also known as the Indian Orchard Fire Station, was built in 1897 and enlarged in 1906 when the bay to the left was added. The original building was designed by Gardner, Pyne and Gardner, a prominent architecture firm at the turn of the last century. It has been used for storage purposes for the past several decades. The Massachusetts Historical Commission classifies the building as individually eligible for listing on the National Register of Historic Places.



Aerial view looking north



Zoning

Res A	Res C-1	Bus A	Ind Park
Res A-1	Res C-2	Bus B	Ind A
Res B	Com A	Bus C	Off A
Res C	Com P	Riverfront	Open Space



Housing along Oak Street

The immediately surrounding neighborhood is zoned Residence B, and is primarily developed with two-family housing. Indian Orchard’s Main Street is just several blocks north, with business zoning that accommodates shopping, restaurants and multi-family housing. Single family zoning abuts Cottage Hill Park and the edge of Long Pond to the south. A classic mill complex, which now houses artists and small industrial tenants, lines the canal along the Chicopee River. The overall pattern of zoning, with its rapid changes from industrial, to downtown business, to lake-edge single family, reflects the small-town structure and character of Indian Orchard.

Sumner Avenue Station: History, Context and Zoning



The Sumner Avenue Station was built in 1925 on a residential lot along the main east-west boulevard in East Forest Park. It was designed by the firm of B. Hammett Seabury, and sits on a 5,000 s.f. residential lot at the corner of Howes Street. The design combines a masonry base with a stucco cap and gable roof, which reduces its visual impact on the residential neighborhood. It was in service until recently, and is presently in use for vehicle storage.



Aerial view of neighborhood looking north



Zoning

Res A	Res C-1	Bus A	Ind Park
Res A-1	Res C-2	Bus B	Ind A
Res B	Com A	Bus C	Off A
Res C	Com P	Riverfront	Open Space

This fire station is located in a short strip of two-family zoning that is surrounded by a monolithic single-family district. East Forest Park was primarily built-out in the first half of the twentieth century and has typically been well-maintained and heavily landscaped.



Looking east along Sumner Avenue

As can be seen from the photo to the left, the street trees in the wide city-owned planting strip along the edge of Sumner Avenue reduce the visual impact of the bulkier two-family homes. Similar planting in front of the fire station would help blend it into the neighborhood. Neighbors have expressed a strong desire for residential use without obvious commercial characteristics.

Oakland Street Station: History, Context and Zoning



The Oakland Street Station was built in 1894-95 and enlarged in 1907. The hose tower (at the right rear) was added in 1969. B.H. Seabury, who designed ten fire stations in Springfield, was the original architect. The building features his signature curvilinear parapets. The interior was remodeled in 1969, and the station remained in service until recently. The Massachusetts Historical Commission classifies the building as individually eligible for listing on the National Register of Historic Places.



View of neighborhood, looking east.



Zoning

Res A	Res C-1	Bus A	Ind Park
Res A-1	Res C-2	Bus B	Ind A
Res B	Com A	Bus C	Off A
Res C	Com P	Riverfront	Open Space



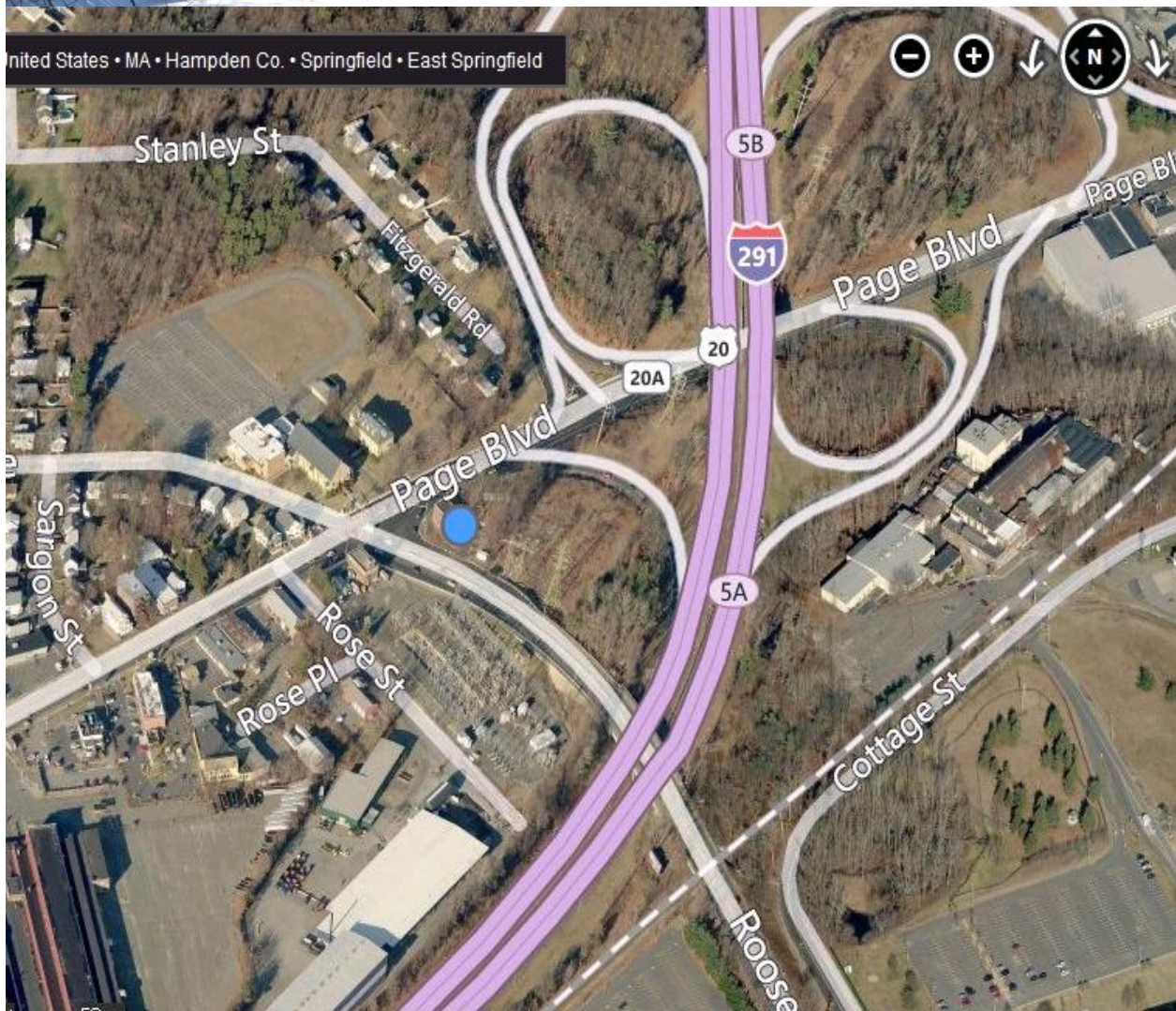
Strip retail diagonally across from the station

The Oakland Street Station is located in the Forest Park district, a densely developed residential area with a mix of housing types and income levels. It is within a Business A zone and is part of a commercial district that runs along Belmont Avenue and continues up Oakland Street as far as the intersection with Dickenson Street. To the other directions the area is primarily zoned for residential use, with a mix of two-family and three-family areas, as well as grand-fathered multi-family buildings. Retail in the immediate area includes business services, restaurants, auto repair, and a large grocery store.

833 Page Boulevard: History, Context and Zoning



The Page Boulevard Station was built in 1927 to plans prepared by B. Hammett Seabury, Architects. It is relatively unadorned, and was located at the edge of town on an urban segment of US Route 20. Its site is now isolated by the curving ramps that connect Interstate 291, Page Boulevard and Roosevelt Avenue. The fire station was closed when the new traffic pattern on Page Boulevard cut off fire truck access from the street.



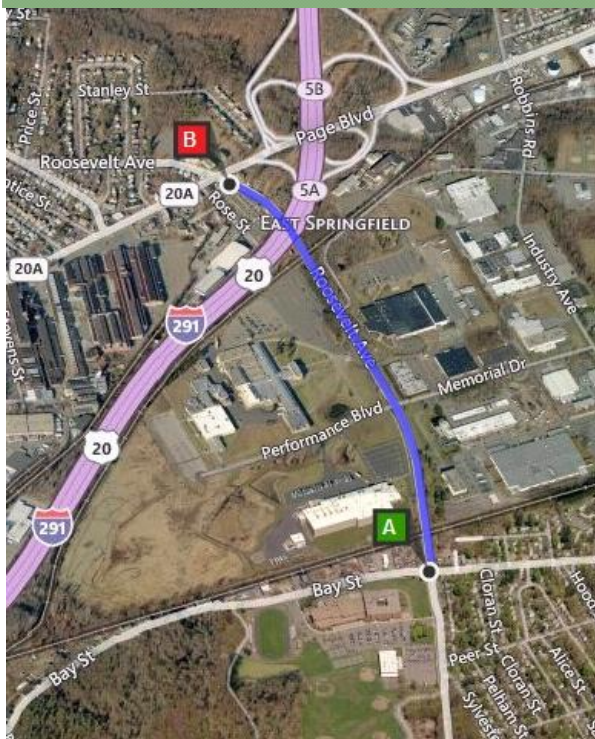
This site is located within a remnant of land isolated by high-volume traffic lanes



Zoning

■ Res A	■ Res C-1	■ Bus A	■ Ind Park
■ Res A-1	■ Res C-2	■ Bus B	■ Ind A
■ Res B	■ Com A	■ Bus C	■ Off A
■ Res C	■ Com P	■ Riverfront	■ Open Space

This site is located in the East Springfield neighborhood. Page Boulevard is primarily a commercial street, zoned for business and industrial use. A major electrical sub-station on the opposite side of Roosevelt Avenue is serviced by high-voltage transmission towers that abut the property. A large church property and single family suburban housing occupy the land to the north. An industrial park fronts both sides of Roosevelt Avenue south of the site.



Roosevelt Avenue is divided in front of the fire station site, and only allows access from the south (Point A). The blue line on the map to the left shows the nearly one mile distance to the fire station (Point B) from the nearest intersection. Although the zoning allows commercial and retail uses, this site has no effective commercial frontage and a long, circuitous access path for cars passing by on Page Boulevard in either direction.

Vehicular access path

2. Market Conditions

This section examines the real estate marketplace in Springfield and its larger market area. Springfield is tracked by the real estate industry by neighborhoods for some uses, as Hampden County for others, and as part of the greater Hartford market for regional data. Using a combination of specific market research and published reports for wider regions it is possible to arrive at sales and rental rates that reflect the current marketplace. The following market categories are examined:

- The Springfield and regional Office Market
- The Springfield and regional Retail Market
- The Springfield and regional Rental Residential Market
- The East Forest Park Residential Market (sales prices)
- The Forest Park Residential Market (rental rates)
- The Regional Studio Space Market

Springfield's population grew from 152,000 to 153,000 in the decade from 2000 to 2010, and housing stock increased moderately as well, from 61,172 units to 61,706 units. The amount of vacant housing grew from 4,000 to 5,000 units a result of the recession. As of 2010 there were 56,752 occupied units within the city. Median household income grew from \$30,500 to \$35,600, but remains low compared to most municipalities in the state.

Population		Total Housing			
2000	152,082	2000	61,172		
2010	153,060	2010	61,706		
% Change from 2000 to 2010		% Change from 2000 to 2010			
0.64%		0.87%			
Total Housing - Occupied		Total Housing - Vacant			
2000	57,130	2000	4,042		
2010	56,752	2010	4,954		
% Change from 2000 to 2010		% Change from 2000 to 2010			
-0.66%		22.56%			
Median Age - Householder	Avg Household Size	Median Household Income			
2000	46.5	2000	2.57	2000	\$30,487
2007	47.1	2007	2.55	2007	\$33,479
2011	32	2011	2.6	2011	\$35,603

The Springfield and Regional Office Market

Office space is a re-use option for the fire stations with commercial zoning, and potentially for those in residential districts if a variance were granted. It is tracked by CoStar in the greater Hartford market, with statistics presented for the overall region, Hamden County,

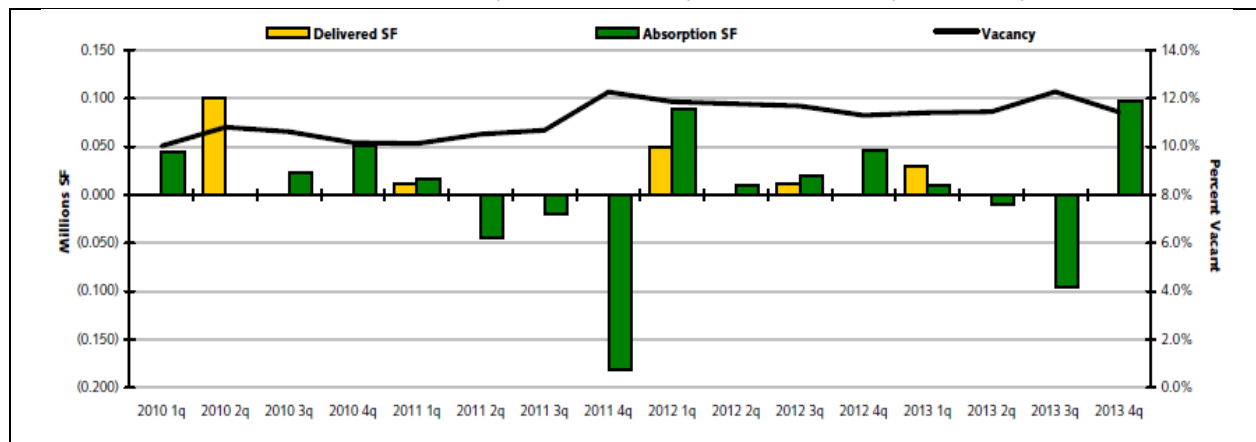
and Hampshire County. In the entire Hartford to Springfield region the last period of office space expansion occurred in the 1980's, with comparatively little new inventory added since.

Hamden County has an 11.6 million square foot office market that is primarily located in Springfield, its suburbs, and Holyoke. This figure includes all classes of office space. The office rent level throughout the county averages \$15.86, down from \$16.50 in 2010. Overall vacancy for office space in Hampden County has been fairly steady at just over 11%, having risen from 10% in 2010. Class C office space is reported at a lower 9.3% vacancy rate.

Hampshire County, to the north, has a 3.4 million square foot office market centered in the college towns of Easthampton, Northampton and Amherst. Office space there rents at an average rate of \$18.50, having risen from \$16.22 in 2010. Vacancy in 2013 is low at 3.4%, having dropped from 6.4% since 2010.

Deliveries of new office space in Hampden County have been small, with approximately 25,000 square feet of new space added to the overall stock in Hampden County in 2013, and approximately 60,000 s.f. added in 2012. Overall office absorption, as seen on the chart below, roughly balances between positive and negative quarters. The sluggish economy and increases in office automation have both reduced office demand. Creative economy and education-related office uses have tended to gravitate towards the academic towns in Hampshire County. One of the bright spots in Hampden County's office market has been medical office space, a use which typically requires fully accessible space and good quality mechanical systems.

Office Deliveries, Absorption and Vacancy, All Classes, Hampden County



Data from CoStar

This report focuses in on rental rates for office buildings within a five-mile radius of downtown Springfield, an area that includes the subject sites. Buildings under 12,000 s.f. are included in the survey, and large buildings are excluded. The results are listed by location, with the rental options listed from lowest to highest for each municipality. Research into the

specific properties determined the lease types, which is useful when comparing office properties. Net rent (nnn) does not include operating expenses or taxes, which can add an additional three to six dollars per s.f. to the actual cost of occupancy. Modified Gross rent (mg) includes all expenses except hvac and electricity. Gross rent (g) includes all expenses. The higher rents are achieved in the cities surrounding Springfield. Based on this data it appears that a net rent of \$8 to \$12 per s.f. would be appropriate for office space in the Springfield fire stations. Medical office space, which is not included in the examples below, rents for a several dollars per square foot more than equivalently located standard office space.

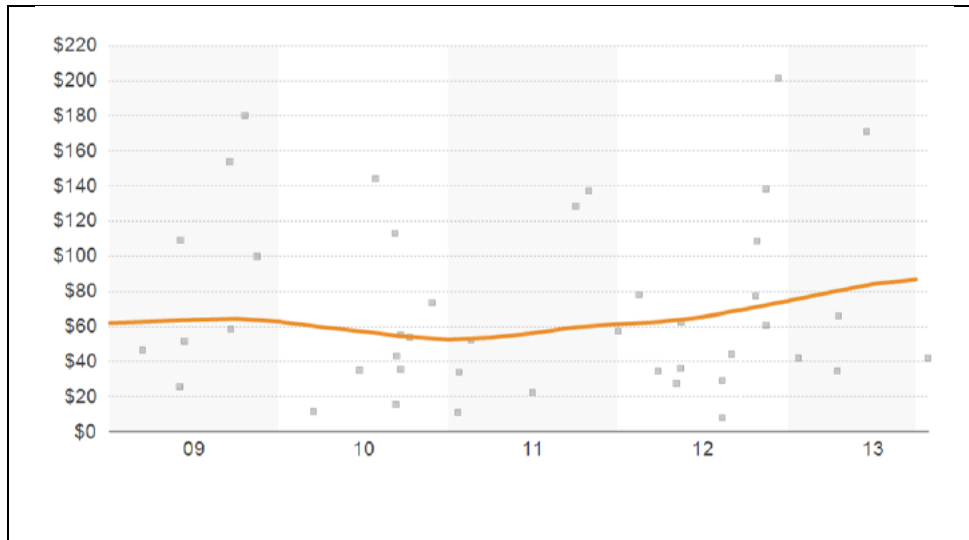
Office Rents – Springfield and Vicinity, arranged by municipality

Address	City	Property Type	Property Size	Space Avail	Rent/SF/Yr	
507 Southampton Rd	Westfield	Class B Office	7,000 SF	2,200 SF	\$7.36	mg
10 Union Ave	Westfield	Class C Office	6,260 SF	1,000 SF	\$10.50	mg
170 Lockhouse Rd	Westfield	Class C Office	7,225 SF	3,200 SF	\$12.00	nnn
70 Court St	Westfield	Class C Office/Medical	12,000 SF	2,130 SF	\$12.00-\$12.12	mg
82 Broad St	Westfield	Class C Office	6,981 SF	2,400 SF	\$11.45-\$13.98	g
3 Century Way	West Springfield	Class C Office	8,232 SF	4,456 SF	\$8.50	nnn
68 Wayside Ave	West Springfield	Class B Office	4,800 SF	4,800 SF	\$12.00	nnn
1284 Elm St	West Springfield	Class C Office	8,168 SF	915 SF	\$13.00	g
2119 Riverdale St	West Springfield	Class C Office	4,442 SF	4,442 SF	\$13.00	g
51 Park Ave	West Springfield	Class C Office	10,306 SF	1,164 SF	\$14.00	mg
166-176 South Blvd	West Springfield	Class C Office	7,480 SF	3,500 SF	\$12.00-\$14.00	mg
214 New Bridge St	West Springfield	Class C Office	2,100 SF	2,100 SF	\$14.28	mg
1227 Elm St	West Springfield	Class C Office	2,070 SF	500 SF	\$31.20-\$31.50	mg
133 Maple St	Springfield	Class C Office/Medical	11,000 SF	5,143 SF	\$8.00	g
177 Rocus St	Springfield	Class C Office	6,400 SF	1,600 SF	\$8.00	nnn
25 Mill St	Springfield	Class C Office	9,060 SF	3,600 SF	\$8.33	mg
18 Gaucher St	Springfield	Class C Office	4,600 SF	1,400 SF	\$10.00	g
184 Mill St	Springfield	Class B Office	9,480 SF	9,480 SF	\$10.00	nnn
1242 Main St	Springfield	Class B Office	9,296 SF	6,972 SF	\$12.00	g
75 Market Pl	Springfield	Class C Office	11,505 SF	11,505 SF	\$12.00	mg
933 E Columbus Ave	Springfield	Class B Office/Office Live/Work Unit	12,000 SF	2,690 SF	\$15.00-\$16.00	nnn
1018 Thorndike St	Palmer	Class C Office	2,552 SF	1,512 SF	\$17.46	mg
1448 Main St	Palmer	Class C Office	7,278 SF	2,915 SF	\$10.88-\$26.40	g
66 Dwight Rd	Longmeadow	Class B Office	11,950 SF	1,800 SF	\$22.00	nnn
300-306 Race St	Holyoke	Class B Office	11,723 SF	10,000 SF	\$7.00	nnn
476 Appleton St	Holyoke	Class C Office	7,274 SF	6,000 SF	\$10.00	nnn
100 Whiting Farms Rd	Holyoke	Class C Office	5,850 SF	412 SF	\$24.76	g
850 Springfield St	Feeding Hills	Class C Office	3,347 SF	1,100 SF	\$12.00	mg
674 N Main St	East Longmeadow	Class B Office/Loft/Creative Space	2,898 SF	2,898 SF	\$6.21	nnn
232 N Main St	East Longmeadow	Class B Office	3,500 SF	3,500 SF	\$12.50	nnn
296 North Main St	East Longmeadow	Class B Office	9,600 SF	4,800 SF	\$12.00-\$14.00	mg
100 Shaker Rd	East Longmeadow	Class C Office	12,000 SF	3,930 SF	\$15.00	mg

Data from CoStar

Average sales prices for office space within this same radius have climbed from \$60 per s.f. in 2009 to \$95 per s.f. at the end of 2013 as seen on the chart below.

Office Building Sale Price per Square Foot – Springfield and Vicinity



Data from CoStar

The average figure is well below replacement cost. Few of the dots on the chart above are close to the \$150 to \$200 per s.f. cost of constructing new office space – most represent sales of buildings that would not be economical to build today. Renovated office space within a reused fire station will need more than ordinary market appeal to be a valuable investment for an owner/developer. It might be leased to a clinic, insurance agency or educational group that likes the image and singularity of a fire station location. It might be leased to a social service agency or non-profit active in the area. Such tenants might appreciate the space enough to justify a rent that in turn justifies the renovation investment.

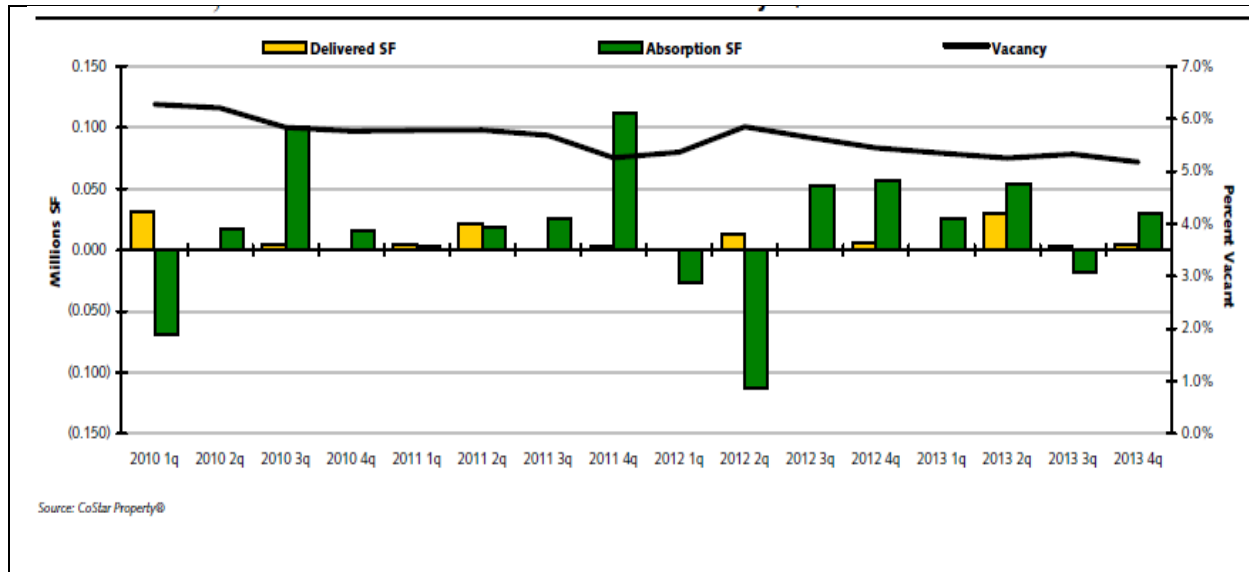
The Springfield and Regional Retail Market

Retail space exhibits more rent and price variability than office space, with high rates paid for space in a good retail location, and much lower rates paid in lesser locations. One of the main predictors of retail rent is ease of access – hence locations by transit stations or at major highway intersections command the highest rental rates and selling prices.

Retail statistics are tracked in the greater Hartford market, with data presented for the overall region, Hamden County, and Hampshire County. Hampshire County, to the north, has an 8.1 million square foot retail market located in 795 tracked properties centered in the college towns of East Hampton, North Hampton and Amherst. Inventory has increased by 60,000 s.f. since 2010. Retail space there rents at an average rate of \$14.85, which is level since 2010. Vacancy is 4.9%, having dropped from 5.6% since 2010.

Hampden County has a 25.8 million square foot retail market located in 2,224 tracked properties primarily located in Springfield, its suburbs, and Holyoke. The average retail rent throughout the county is \$11.60, down from \$12.94 in 2010. Overall vacancy for retail space in Hampden County has declined to 5.2% from 6.3% in 2010.

Retail Deliveries, Absorption and Vacancy, All Classes, Hampden County



The following chart shows retail rents within the City of Springfield, per square foot, arranged by rental rate. The chart includes properties in storefronts or free-standing buildings. Data from shopping centers is eliminated. Asking rents range from a low of \$5.00 nnn for an unattractive space along Berkshire Avenue to a high of \$30.00 nnn asking rent for a high-quality free-standing building at the corner of Columbus and Union Streets. Most street-front retail along State Street is offered for \$12.00 nnn, but this may change if the planned casino is developed. Some examples of retail rentals relevant to the Oakland Street and Page Boulevard fire stations include:

- A second floor office/retail space at 509 Belmont Avenue, several blocks from the Oakland Street Station, offered at \$10.20 plus utilities.
- Small retail spaces offered for \$12.00 nnn in a multi-story masonry building at 75 Broad Street, close to the Amtrak Station.
- A 7,000 s.f. space offered for \$9.00 nnn on Sumner Avenue, formerly a Goodwill Store
- A 1,000 s.f. space on Page Boulevard offered for \$10.80, modified gross.

Retail Rents per Square Foot – Springfield, arranged by price

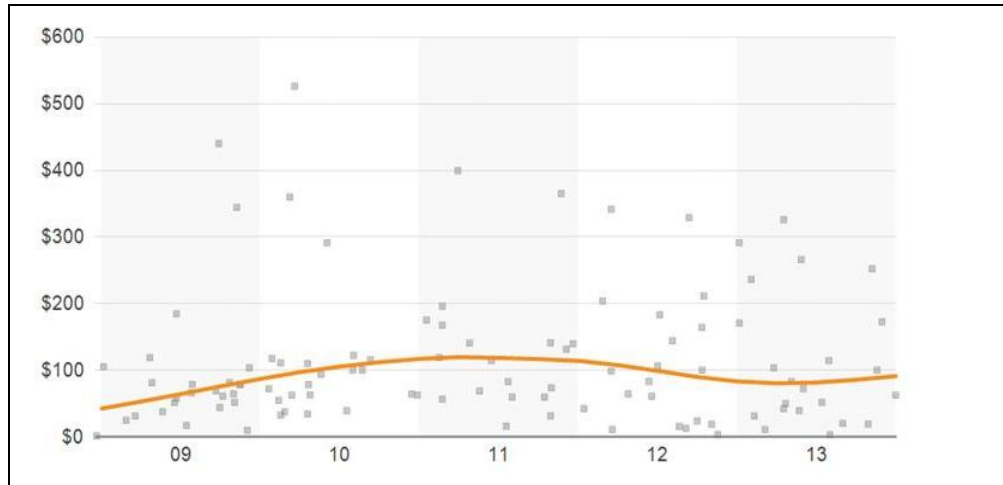
Address	City	Property Type	Property Size	Space Avail	Rent/SF/Yr
355 Berkshire Ave	Springfield	Retail	14,640 SF	10,000 SF	\$5.05
139-143 Main St	Springfield	Retail/Storefront	5,940 SF	2,400 SF	\$6.00
385 Bay St	Springfield	Retail/Freestanding	5,184 SF	5,184 SF	\$6.60
133-141 State St	Springfield	Retail/Storefront Retail/Office	15,000 SF	4,800 SF	\$8.00
1515 State St	Springfield	Retail	20,725 SF	20,725 SF	\$8.00
90 Carando Dr	Springfield	Retail/Health Club	25,450 SF	3,800 SF	\$9.00
473-479 Sumner Ave	Springfield	Retail	21,166 SF	7,000 SF	\$9.00
5 Dwight St	Springfield	Retail/Freestanding	3,450 SF	3,450 SF	\$9.50
54-62 Main St	Springfield	Retail/Freestanding	6,772 SF	6,772 SF	\$10.00
459 Main St	Springfield	Retail	9,600 SF	9,600 SF	\$10.00
443 State St	Springfield	Retail/Freestanding	38,382 SF	38,382 SF	\$10.00
54-72 Willow St	Springfield	Retail/Storefront Retail/Residential	40,000 SF	3,450 SF	\$10.00
509-511 Belmont Ave	Springfield	Retail/Storefront Retail/Office	2,798 SF	850 SF	\$10.20
538-542 Page Blvd	Springfield	Retail/Storefront Retail/Residential	6,861 SF	1,000 SF	\$10.80
520-526 Main St	Indian Orchard	Retail/Storefront	12,000 SF	800 SF	\$11.92
1535 Bay St	Springfield	Retail/Auto Dealership	48,750 SF	48,750 SF	\$12.00
198-202 Chestnut St	Springfield	Retail/Storefront Retail/Office	32,078 SF	3,780 SF	\$12.00
1095 Main St	Springfield	Retail/Storefront Retail/Office	31,014 SF	9,000 SF	\$10.00-\$12.00
1373-1383 Main St	Springfield	Retail/Storefront Retail/Office	46,642 SF	15,060 SF	\$10.00-\$12.00
1600 Main St	Springfield	Retail/Storefront Retail/Residential	30,276 SF	1,600 SF	\$12.00
280-300 Worthington St	Springfield	Retail/Storefront Retail/Office	21,500 SF	15,400 SF	\$4.00-\$12.00
900 Allen St	Springfield	Retail/Storefront	2,964 SF	2,964 SF	\$13.00
1984 Boston Rd	Wilbraham	Retail/Freestanding	5,544 SF	5,544 SF	\$14.00
1500 Boston Post Rd	Springfield	Retail/Restaurant	9,700 SF	9,700 SF	\$14.00
22 Broad St	Springfield	Retail/Storefront Retail/Office	3,600 SF	2,200 SF	\$12.00-\$14.00
363-365 Boston Rd	Springfield	Retail/Storefront	4,000 SF	2,000 SF	\$9.00-\$15.00
117 State St	Springfield	Retail/Freestanding	30,000 SF	1,400 SF	\$15.00
762 Boston Rd	Springfield	Retail	2,850 SF	1,200 SF	\$15.50
145 Armory St	Springfield	Retail/Freestanding	1,523 SF	1,200 SF	\$17.00
3 Edgewood Ave	Longmeadow	Retail	1,000 SF	1,000 SF	\$19.20
1259 B E Columbus Ave	Springfield	Retail/Freestanding	5,000 SF	4,544 SF	\$30.00

Data from CoStar

The selling price of retail space varies as widely as the rents, with recent sales (from 2102 through present) ranging from \$20.00 per square foot on Main Street in Indian Orchard to \$400 per square foot for the Golden Corral restaurant in an busy retail area along the Boston Post Road. 435 White Street, a two-story masonry retail/office building close to the Oakland Street station sold for \$82 per square foot in 2011.

The value of retail space has risen since 2009 and stayed fairly constant since. The average price paid for this type of space is presently just under \$100 per square foot. This equates to \$12.50 net rent per square foot if capitalized at a 9% rate.

Retail Building Sale Price per Square Foot – Springfield and Vicinity



Data from CoStar

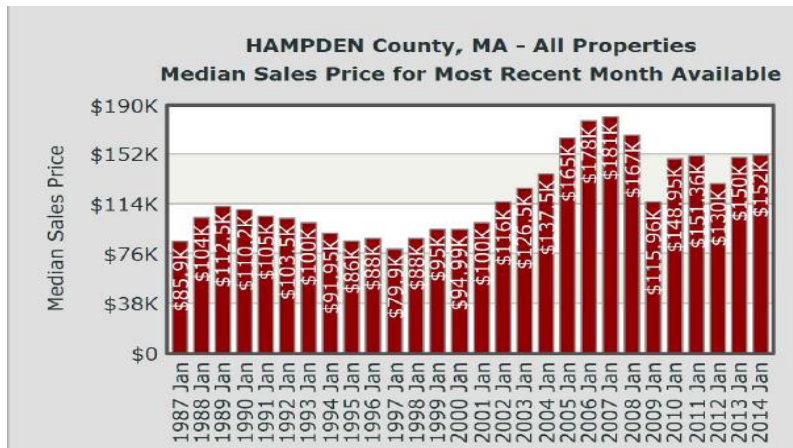
The Local and Regional Housing Market

City and County Housing Values:

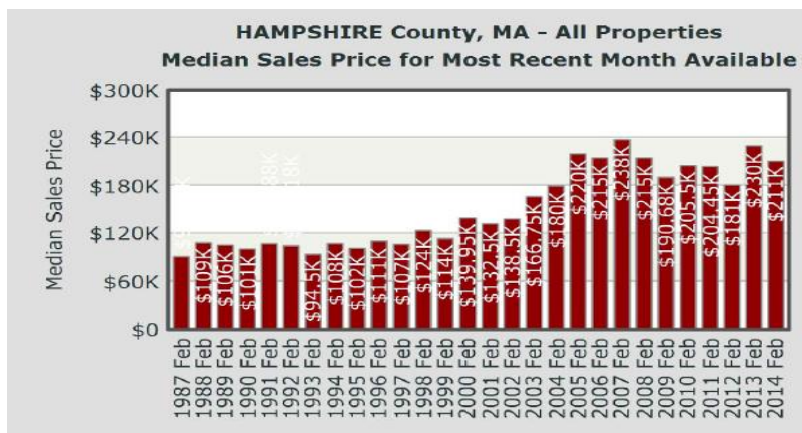
Several of the fire stations have potential for single or two-family reuse. Data from the Warren Group allows detailed assessment of the local and regional housing markets. The typical real estate barometer, except in the largest cities, is the selling price of single family housing. Springfield peaked at an average selling price that was just \$20,000 below the county in 2007, but as of 2014 the city’s average sales price lags the county by \$45,000. Recovery in the city’s single family market is coming slowly. The charts below show the overall pattern of home prices in the City, Hampden County, and Hampshire County to the north.



- Springfield’s median residential selling price rose from \$74,500 in 2000 to \$160,000 in 2007. It declined sharply to \$56,000 in 2009, and has since risen to \$107,000 in 2013. Since 2000 the median selling price of a home in Springfield has risen by approximately 44%.



- Hampden County's median residential selling price rose from \$95,000 in 2000 to \$181,000 in 2007. It declined sharply to \$116,000 in 2009, and rose to \$152,000 in 2013. Since 2000 the median selling price of a home in Hampden County has risen by approximately 60%.



- Hampshire County's median residential selling price rose from \$140,000 in 2000 to \$238,000 in 2007. It declined to \$190,000 in 2009, and has since risen to \$211,000 in 2013. Since 2000 the median selling price of a home in Hampshire County has risen by approximately 50%.

Residential sales prices in East Forest Park:

Recent residential sales in East Forest Park show a pattern of great value for the buyer, relative to the quality of the neighborhood and the housing stock. In early 2013 a modest single family home on a 5,000 s.f. lot on the block next to the Sumner Avenue fire station sold for \$120,000, or approximately \$71 per square foot of living area. The average 2013 sales price for the 207 single family home sales in East Forest Park was \$136,700, substantially higher than the city-wide average of \$107,000. The highest sales price occurred in December, 2013 when a two-story colonial on a quiet street about one-half mile northeast of the Sumner Avenue fire station sold for \$242,000, or approximately \$103 per square foot. It was one of 11 East Forest Park homes that sold for \$200,000 or more during 2013.

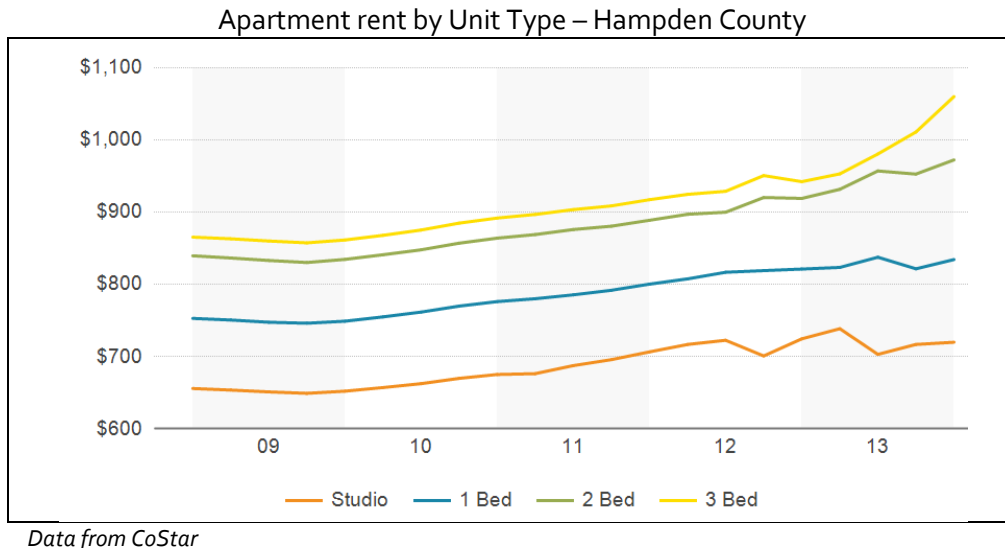
Five two-family homes sold in East Forest Park during 2103, for prices ranging from \$83,000 to \$175,800. At the height of the market in 2007 two families in this area were selling for approximately \$200,000.

Residential sales prices in Indian Orchard:

The average 2013 sales price for the 22 two-family home sales in Indian Orchard was \$98,094. The highest price for a two-family sale occurred in April, 2013 when a 3,800 s.f. two-family close to Long Pond sold for \$162,000, or approximately \$43 per square foot. It had previously sold for \$196,000 in 2004 and was subsequently bought out of foreclosure for \$50,000 in 2009. Much of the lost value since the peak has been regained. A two-family approximately one half mile south of the Oak Street fire station sold for \$130,000 to a church in December, 2013. There were 43 single family homes sold in Indian Orchard in 2103, for an average price of \$105,600. The most expensive was a two-story colonial that sold for \$212,750 in September, 2013.

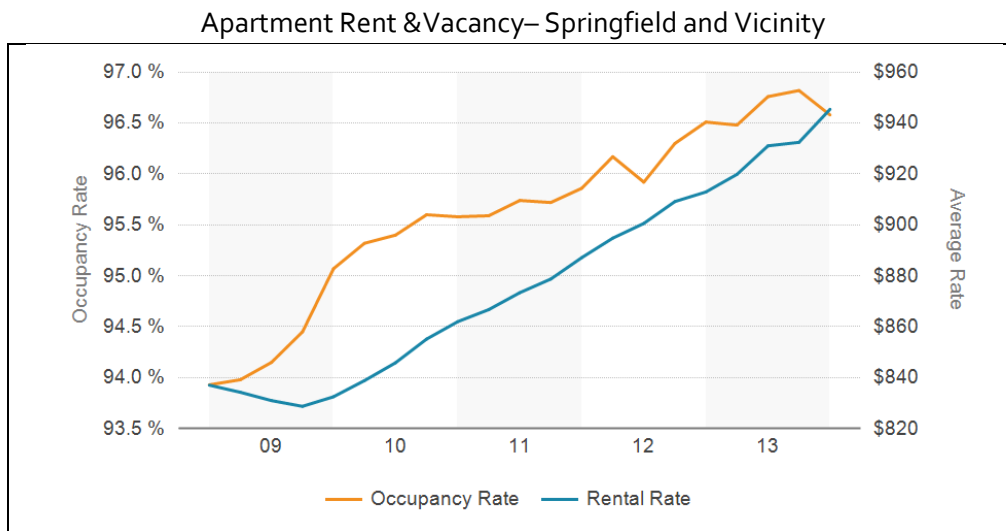
Apartment rental statistics

The Indian Orchard and Oakland Street fire stations are both large enough to potentially be divided into rental apartments. This use would require zoning review in both cases. Costar tracks several hundred rental properties in Hampden County and reports a gradual rise in rental rates for apartments over the past several years, as can be seen in the chart below. Rental rates in Springfield are also tracked and show a similar pattern.



The rent for a two-bedroom apartment is presently close to \$1,000 per month. Studio rentals appear to be leveling out around \$700 per month, and one bedroom rent is leveling at just over \$800. Rents for two bedroom units are close to \$1,000 per month. Rent for three

bedroom units, which are relatively rare in new construction, has risen faster than rent for smaller units in recent years.

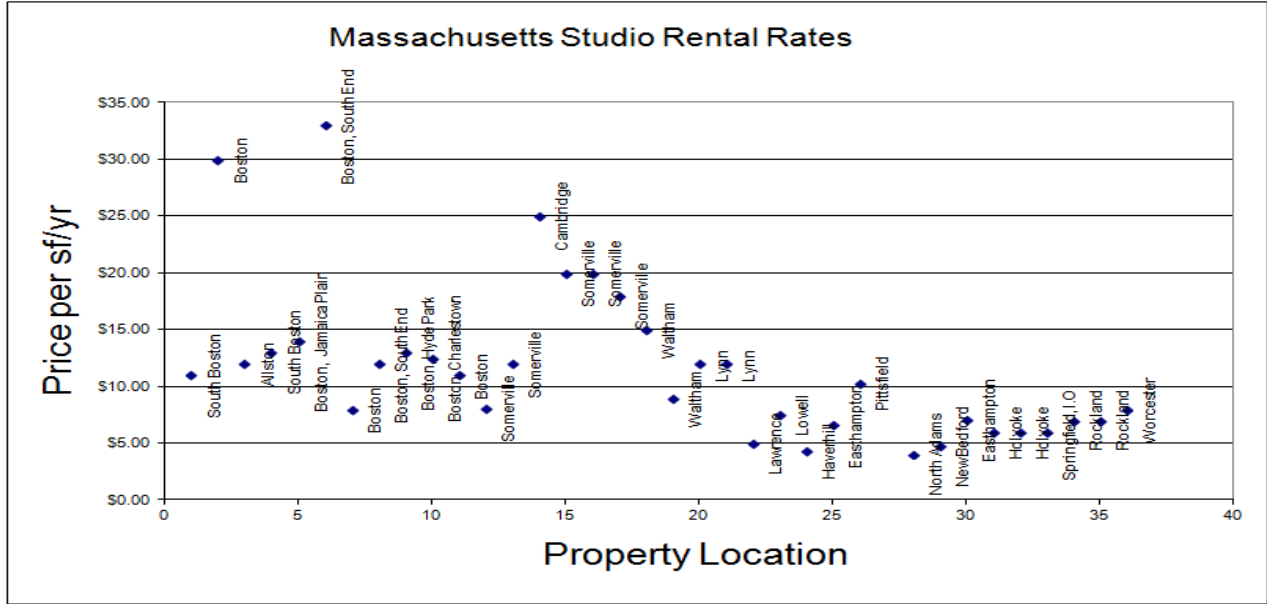


The pattern of rising rents and falling vacancy, which benefits landlords and developers, is reaching a point where vacancy rates are beginning to rise. This may be a temporary aberration in what has been a general trend towards a healthier rental market.

Sales of multi-family buildings in Hampden County since 2008 were examined. Many sales were of the older masonry walk-up buildings that are prevalent in Springfield and Holyoke’s urban neighborhoods. They typically transferred at capitalization rates from 10% to 12%, and prices from \$20,000 to \$50,000 per unit. The other broad category of sales was of garden style apartments that sold at capitalization rates of 6.5% to 8%, at prices from \$55,000 to \$85,000 per unit. Recent increases in rent do not seem to be translating into higher sales prices per unit, possibly because owners have chosen to wait for a better market climate.

The Regional Studio Space Market

Springfield is home to a flourishing arts community, one of the largest in the state, which supports many buildings fully or partially rented as studio space. Studio and general creative work space rents for much less in the western than the eastern part of the state, as can be seen on the chart below which was created by the Artist Link program of the Massachusetts Cultural Council.



Massachusetts ArtistLink

Good quality studio space in western Massachusetts typically rents for \$5 to \$10 per square foot of demised area, depending on the size of the space and amenities, with the tenant often responsible for some operating expenses. During the past several years the studio market in Springfield and Holyoke appears to have tightened according to some studio landlords, although no official statistics are gathered on a regular basis.

3. Reused Fire Stations: Case Studies

For many reasons it is unusual to tear down a firehouse. They work themselves into the fabric of a community and seem to embody its history in a very simple, straight-forward way. Along with churches, fire stations are extremely “image-able”, easy for everyone to identify for what they are. Big garage doors with their large glass panes – the firehouse style developed its identity long before cheap electric light – make them seem friendlier than most public buildings. The fact that the employees not only put their lives in danger, but also slept upstairs, cooked their own dinners, slid down poles, and carried on a sort of domestic life in the same building that housed their fire trucks adds to the hold these buildings have on the imagination.

Except in the densest and oldest downtown districts, fire stations are free-standing. This allows them to have windows on all sides and suits them for many new uses. They are usually located on the wider, busier streets, which spurs architects into putting forth their best efforts. Even when public funds are tight, fire stations benefit from budgets big enough to indulge in the architectural flourishes of their time.

It is hard for any new use to compete with the rich history and image of heroic firefighters, big red trucks, spotted Dalmatians, and screaming sirens. But new occupants fit quite well into fire stations. Unlike churches, where most new uses seem a bit ill-at-ease in their formerly sacred surroundings, fire stations are used, comfortably, for just about every type of activity, as can be seen in the cases presented in this report.

Case Study 1: Rental apartments, Fall River

Case Study 2: Single family live/work, East Providence

Case Study 3: Business/residential mixed Use, Fall River

Case Study 4: Performing arts center, Framingham

Case Study 5: Music education and community advocacy, East Boston

Case Study 6: Specialty housing, Springfield

Many of these uses make a distinction between the open, high-ceilinged downstairs, and the partitioned, lower-ceilinged upstairs. But all seem at-home in the former fire stations, whether or not they maintain the looming space of the fire truck garage. The cases that are focused on illustrate issues relevant to the types of reuse posited in this report.

Case Study 1: Rental Apartments, Fall River

Location: 77 Freedom Street, Fall River

Original Name: Massasoit Fire House
No. 5

Type of reuse: Rental apartments

Type of ownership: Private, for-profit

Historic Status: National Register of
Historic Places

Building Area: 5,700 s.f. apartments

Site Area: 14,710 s.f.

Contact: Charles Jacobsen



This is an example of a fire station developed as a market-rate apartment building by a private owner. The building dates from 1873 during Fall River's period as one of the busiest textile mill cities in the nation, and was designed by Boston architects Hartwell & Swazey. Charles Jacobsen, a local carpenter/builder was awarded the building in 1989 for \$37,000 in a sealed bid auction. This was not the low bid, but the neighbors did not favor a higher bid that proposed more density. Any use that required more than three units required a variance. The building received zoning permission for seven units, but due to the recession of the 1990's construction stopped after completion of four large and unique apartments. The fire truck garage, two-story rear extension and a portion of the attic remain to be renovated.

The renovations, both interior and exterior, cost an estimated \$300,000, including asbestos removal, extensive masonry pointing, and use of formerly empty attic space. The project was originally awarded federal historic tax credits, and went through both Part 1 and Part 2 of the



New skylights and kitchen island in former attic.

process. Since the project was only partially completed, it was not possible to file the final Part 3 completion documentation. Therefore certification was not granted and the tax credits could not be utilized. Following partial completion and financial stabilization, the building was financed with a \$158,000 commercial mortgage, since discharged. The units are unique and rent at the upper end of the local price range. The building remains in the control of the developer and his family who manage it privately.

Case Study 2: Single Family Live/Work, East Providence

Location: 27 Newman Avenue, Providence, RI
Original Name: Rumford Fire Station
Type of reuse: Live-work residential
Type of ownership: Private residential
Historic Status: not listed
Building Area: 4,004 s.f.
Site Area: 14,172 s.f.

An existing skylight was exposed at the upper level, the ceiling raised two feet. The steel beams are original to the building.



This small fire station was built in 1931 and remained in service through the end of the century. In 2004 it was offered for sale in a sealed bid process. The high offer of \$185,000 was submitted by Jerry Mishak and Wendy Edwards, a husband and wife team of artists and college professors. They had previously lived in a house on the Brown University Campus and were renting two separate studios. This firehouse presented an economical opportunity to consolidate their space into one privately owned live-work dwelling.



The renovation was designed by Two Ton Inc. of Providence. According to a building condition report provided to potential buyers,

there was evidence of lead-base paint, asbestos and possible hazardous materials throughout. These issues were dealt by the owners, who had time to assess their cost after the bid was placed, but before the purchase was completed.

The new owners kept many of the features of the existing building. The second-floor bathroom had four showers and four sinks, as well as two toilets, but was modified while keeping the original ceramic tile. Other parts of the second floor were gutted and rebuilt, but the first floor functioned as studio space with virtually no spatial modification required. The owners did a portion of the construction themselves, which kept the costs in check. Radiant heat was installed in a new floor slab at ground level studio. Construction cost \$160,000





Garage doors were replaced with operable insulating glass units

and included \$60,000 for new wiring, plumbing and heating. The insulated glass and aluminum garage doors cost \$12,000. The first floor was retained as an open studio space - at 2,000 s.f. it was large enough for two separate work areas.

The project is financed with a home mortgage for approximately 60 percent of the cost of the original investment. The owners have created a single structure that provides a custom-built and affordable place to both live and work.

Case Study 3: Business/Residential Mixed Use, Fall River

Location: 1058 Pleasant Street, Fall River
Original Name: Pocasset Fire-House No. 7
Type of ownership: Private, for-profit
Historic Status: National Register of Historic Places
Building Size: 10,910 s.f. on 2 floors
Site Area: 10,684 s.f.



Dating from 1873, this firehouse was one of three in Fall River designed by the architecture firm of Hartwell & Swazey, and is essentially the mirror image of the Freedom Street station in Case Study 1. This building is in a mixed residential/commercial zone. Alan Amaral, the owner, purchased the building in 1990 for less than \$100,000 and estimates that he has since invested close to one million dollars in its restoration and maintenance. The renovations are historically sensitive, but the owner did not utilize historic tax credits or go through the design review that they require due to concerns about replicating or restoring copper gutters, wood windows and the slate roof.

The owner originally used the entire space for manufacturing technically advanced yo-yo's, but by 1997 his space needs outgrew the firehouse and the manufacturing operation was moved to a small mill building that the owner also purchased and restored.

At present the ground level remains in office/manufacturing use. It is occupied by Baker Sign Works, signage and graphics business that uses the garage bays for production and the former police area for offices. Rent for the ground floor is at market for office/industrial flex space. The owner retains the long hook and ladder bay (protruding at left, above) as a management and maintenance area. There are three apartments on the upper floor, each unique in size and configuration. They are built out with new systems and partitions. Rent for the apartments is at market for the neighborhood and ranges from \$600 for a one-bedroom unit to \$1,200 for a large three bedroom unit.

The owner recently had the property appraised, with the value estimated to be approximately \$500,000 in Fall River's present real estate market. While this is less than the overall sum of the original purchase and renovation expenses, the owner reports that saving a notable and beautiful building has always been a large part of the reason he purchased and restored it, and does not regret the decision.

Case Study 4: Performing Arts Center, Framingham

Location: 60 Hollis Street, Framingham
Original name: Hollis Street Firehouse
Current name: Amazing Things Arts Center
Type of reuse: Community cultural center
Type of ownership: Private, non-profit
Building Size: 10,910 s.f. on 2 floors
Site Area: 14,092 s.f.
Contact: Phil Knudsen, Director



This firehouse remained in service as Framingham's downtown police and fire station until 1988 when it was converted to a boys and girls club, with the city retaining ownership. By the mid-2000's the club outgrew the space and relocated.

Since 2007 the firehouse has been the home of the Amazing Things Arts Center, an existing group that was looking for a larger space. The Amazing Things Arts Center runs a very active performance schedule, with a focus on music and comedy. It also serves as a center for the visual arts community, with exhibit space in several second floor galleries. The former truck bays allow

column-free seating for up to 185 spectators on low risers. (According to the former director, if the space were moderately larger and could seat over 200, it would be able to book a higher tier of performers who bring in more people at a higher ticket price) The ceiling height of 15' allows space for lighting and ductwork. The second floor is used for a green-room, gallery spaces, and a small kitchen. The 1988 renovations had included new mechanical and electrical systems and an elevator and accessible restrooms, saving the arts center an estimated \$750,000 in renovation expenses.

The City of Framingham was fully in support of the project. Rather than sell the building outright the city and non-profit arts center entered into a fifty year lease for the nominal rent of \$1 per year, with the arts center responsible for all upkeep and maintenance. In exchange, the arts center committed to spending at least \$600,000 on building improvements during the first five years of occupancy. The long-term lease gives the arts center enough security of tenure to invest in building upgrades, and to apply for grants to fund capital expenditures. At the time of its move-in the center raised over \$250,000 in cash and in-kind services which it used to replace the electrical system, repair masonry, upgrade the bathrooms, and landscape the exterior. Funds from a recent Cultural Facilities Fund grant of \$218,000 have been used to correct a perennially wet basement and to remedy other building deficiencies. Items on the list of coming capital expenditures include new garage doors with better acoustic sound dampening ability. The annual operating budget is primarily raised from ticket sales, and secondarily from fund raising and fees from other arts center operations. The space benefits from a large side yard that can accommodate parking for 40 to 50 cars, and is also close to city-owned parking. The arts center has developed a synergistic relationship with nearby restaurants and contributes to the economic development and renewal of the downtown area.

Case Study 5: Music Education and Community Service

Location: 260 Sumner Street, East Boston

Original name: Engine Company 40

Occupant: Zumix

Type of ownership: Private, non-profit

Historic Status:

Building Size: 8,934 s.f. on 2 floors & basement

Site Area: .

The former fire truck space was kept open for performances and gatherings



Zumix provides music education and other community services to the youth of East Boston. Its director, Madeline Steszynski founded the organization in 1991. After 16 years of operating in provisional and rented quarters it purchased this firehouse from the City of Boston for \$332,000 in December, 2008. Several years later Zumix moved into a fully renovated

facility that includes the basement as well as the main and second story. Zumix is a high-energy organization that focuses on music as a means to enrich the lives of local youth. Its after-school programs have launched music careers and entertained the local residents of East Boston for over two decades. The documented success in improving the lives of inner city youth in this largely Hispanic community helped ZUMIX raise private and public money for the renovation. The list of donors is extensive and includes major corporations as well as individuals.



The renovated fire station is used intensely. Its prominent street-corner location and the large glass panels in the garage doors are in keeping with its high profile. Renovations include equipment for music production along with the standard classrooms, rehearsal space, elevator, stair shafts and administrative area. The space is used intensely, especially during the after school hours.

The total cost for the renovation was nearly \$4,000,000 of which 2.2 million was for construction, .8 million was for fixtures and fit-up, and the remainder was for design, development and legal fees. The East Boston CDC acted as a co-developer. Most of the funding was channeled through MHIC, the Massachusetts Housing Investment Corporation. New Markets Tax Credits yielded equity that covered approximately 25% of the project's cost. Zumix raised over half of the cost through private and corporate fundraising. The remainder is in the form of low and no-interest mortgages tied into the complex New Markets financing. The financial complexity paid off, and Zumix has a state of the art facility that serves it well and operates with virtually no on-going interest payments.

Case Study 6 : Specialty Housing, Springfield

Location: 157 Pine street, Springfield, MA

Original Name: Engine 13

Type of reuse: Housing for handicapped adults

Type of ownership: Private, non-profit

Historic Status: not on national register

Building Size: 14,103 s.f. on 2 floors

Site Area: 14,092 s.f.

Contact: Linda Christian, property manager



This is one of ten fire stations in Springfield designed by the firm of B.H. Seabury, whose unique style is unmistakable. The property manager has nothing but compliments for the high

quality of this solid old firehouse, and also for its architecturally creative 1991 conversion to group housing. The building, which is free-standing like most fire stations, allows units to face all four facades. It currently houses 15 studio and one-bedroom units that provide affordable housing to physically and mentally handicapped adults.

The renovations required a gut-rehab of the space, and divided all of the upper level and most of the first floor into apartments. The area where the central fire pole had been located is now a small atrium with a balcony overlooking the ground level. The basement is unused. The residents do not typically drive or own cars, so parking needs are minimal and can be accommodated on-site.

The renovations were funded by the HUD 202 program for deeply subsidized housing, and the property retains a HUD mortgage of nearly one million dollars, with annual interest payments of approximately \$65,000. Approximately 75% of the \$175,000 annual revenue and operating budget is also provided by an on-going HUD subsidy. The tenant's share of the rent averages about \$240 per month.

The building, its renovation, its on-going operations, and its service to the community are all meritorious. Its exuberant masonry façade, wide arched windows and scalloped copper cornice add zest to the cityscape.

4. Zoning Requirements

In comparison with many cities, Springfield has retained a straightforward zoning ordinance that divides the city into districts that allow specified uses. Height, density, setbacks and parking are also specified in straightforward fashion. However, many uses require some level of review and approval before being permitted. The review types range in degree of formality, from administrative site plan review to approval by the City Council, as indicated on the charts that follow.

- (D) USE allowed AS OF RIGHT subject to limited Site Plan Review
- (T) USE permitted subject to Site Plan Review or Special Permit review
- (1) USE permitted subject to Administrative Site Plan Review
- (2) Use permitted subject to Planning Board Site Plan Review
- (3) Use allowed by City Council Special Permit Review

Off-street parking is required for all uses. There is some flexibility in the enforcement of parking regulations, with dedicated off-site spaces allowed, and relief potentially granted where public transportation is available. A densely planted seven foot wide buffer strip is required where off-street parking abuts a residential area. This buffer applies in all of the sites except Page Boulevard. Parking is required in the ratios listed below:

Single family dwelling:	2 spaces
Two family dwelling:	3 spaces
Multi-family dwelling:	1 space for one-bed, 1.5 spaces for larger units
Community/social service offices:	1 space per 200 s.f. of net floor area
Child Care:	1 per 700 s.f. nfa (net floor area)
Group Home, less than 6 beds:	3 spaces
Group Home, larger:	1 per 3 residents, plus one per employee
Group Residential Facility:	1 per 2 beds
Medical Office:	1 per 300 s.f. nfa
Office:	2 per 1,000 s.f. nfa
Retail sales and service:	4 per 1,000 s.f. nfa
Restaurants:	8 per 1,000 s.f. nfa
Theaters and cinemas:	1 per 6 seats
Funeral Parlor:	5 spaces per viewing room

The Oak Street and the Sumner Avenue sites are both within Residential B zoning districts. This is a fairly restrictive zone meant to preserve open space and front yards and to provide ample on-site parking. Key requirements relevant to the study sites are listed below. Building uses that are in general compliance with the zoning requirements are revealed in the charts that follow. They are indicated in the center column of the chart. Notes relevant to the particular fire houses are in the right hand column.

Residential B District Dimensional Requirements

Minimum lot area: 6,000 s.f. single family dwelling, 8,000 s.f, two-family dwelling

Minimum lot frontage: 50' at lot line

Maximum building coverage:

Minimum yards: 15' front yard, 10' side yard, 25' rear yard

Number of stories, height: 2.5, 35'

Parking: Residential, 2 per unit, other uses as described where relevant



1043 Sumner Avenue

Zoning: Residence B

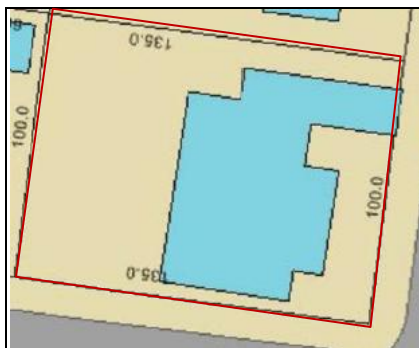
Lot Area: 5,000 s.f.

Building footprint: 2,210 s.f.

Building area, flrs 1,2: 4,420 s.f.

Frontage: 50' Sumner, 100' Howes

Allowable Use	Uses to consider	Notes
Single-family residential		House large to be economical in the neighborhood
Single-family residential	SINGLE FAMILY LIVE-WORK	Minor dimensional non-conformity (lot area, side set-back, lot coverage)
Two-family residential	TWO FAMILY TWO FAMILY LIVE-WORK	Dimensional non-conformity (lot area, side set-back, lot coverage)
Home-based business (1) (2)	STUDIO, ancillary to live-work	Not considered as a stand-alone use
Religious (T)		Insufficient on-site parking
Group Residential (3)		Insufficient on-site parking



Oak Street Indian Orchard

Zoning: Residence B

Lot Area: 13,500 s.f.

Building footprint: 4,388 s.f.

Building area, flrs 1,2: 7,344 s.f.


Frontage: 135' Oak, 100' Berkshire

Allowable Use	Use to consider	Notes
Single-family residential		Too large to be practical
Two-family residential	TWO FAMILY LIVE-WORK	Possible, large units
Home-based business (1)(2)	STUDIO, ancillary to live-work	Not considered a stand-alone use
Religious (T)		Insufficient on-site parking
Group Residential (3)		Dormitory use not suitable
	THREE FAMILY LIVE-WORK	Requires Res C zone change
	APARTMENT	Requires Res C zone change
	STUDIO OR COMMERCIAL SPACE	Requires Commercial A zone change

The **Oakland Street and Page Boulevard sites** are both within **Business A zoning districts**. This is an inclusive zone that allows residential, retail, hotel, office, and restaurant uses. Building uses that meet (or nearly meet) the zoning requirements are revealed in the charts that follow. Key requirements relevant to the study sites are listed below. Notes, including reasons why an allowable use is not considered, are in the right hand column.

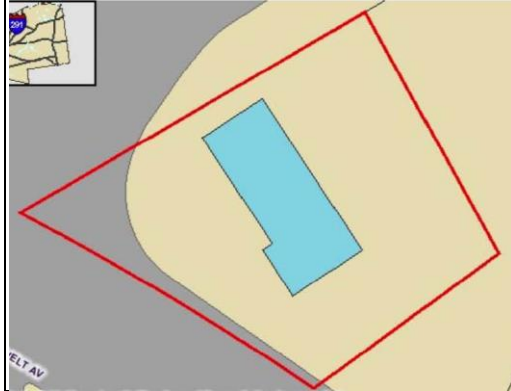
Business A Districts Dimensional Requirements

- Minimum lot area: none required
- Minimum front yard: 10'
- Minimum side yard: 10' abutting a residential district, otherwise none
- Minimum rear yard: 10' abutting a residential district, otherwise none
- Number of stories, height: 4, 60'
- Building Coverage, max: 75%
- Residential density: apartments, 22 units per acre
- Parking: Residential, 2 per unit, other uses as described where relevant



Oakland Street
 Zoning: Business A
 Lot Area 13,948 s.f.
 Building footprint: 3,670 s.f.
 Building area, flrs 1,2: 7,340 s.f.
 Frontage: 105' Oakland,
 113' Dickinson

Allowable Use	Use to consider	Notes
Single-family residential		Building too large to be feasible
Two-family residential		Building too large to be feasible
Apartment building	APARTMENTS, 2 ND flr	Setback precludes 1 ST flr use
Home-based business (1) (2)		Ancillary to apartments, potentially
Religious, Charitable use (T)		Insufficient parking
Child Care, Adult Day Care (T)		Not a desired use at this location
Hotel, Motel (T)		Not suitable
Group Residential, Group Home(3)		Dormitory use not suitable
Retail , Bank, Funeral home (T)	RETAIL 1 ST flr	Similar to restaurant use, less parking
Office Building, Medical Office(T)	OFFICE (incl med) 1 ST , 2 ND flr	
Vehicle Repair, Rental (3)		Not a desirable use
Restaurant (1)	RESTAURANT 1 ST flr	
Club, Tavern (T)		Similar to restaurant use



Page Boulevard

Zoning: Business A

Lot Area: 13,948 s.f.

Building footprint: 3,670 s.f.

Building area, flrs 1,2: 3,276 s.f.

Frontage: 105' Oakland, 113' Dickinson

Allowable Use	Use to consider	Notes
Single-family residential	SINGLE FAMILY LIVE-WORK	Suitable if owner-occupied
Two-family residential		No sidewalks, no cross-walks
Apartment building		No sidewalks, no cross-walks
Home-based business (1) (2)	Ancillary to live/work	
Religious, Charitable use (T)		No sidewalks, no cross-walks
Child Care, Adult Day Care (T)		No sidewalks, no cross-walks
Hotel, Motel (T)		Not large enough, poor access
Group Residential, Group Home(3)		No sidewalks, no cross-walks
Retail , Bank, Funeral home (T)		Poor access
Contractor's shop	CONTRACTOR'S SHOP, 1 st flr	
Office Building, Medical Office(T)	UPPER LEVEL	
Vehicle Repair, Rental (3)		Poor access, but possible
Restaurant (1)		Poor access
Club, Tavern (T)		Poor access

5. Building Code Impacts

When renovating an existing building the developer, designer and estimator work with a structure built in a different era, under prior codes with different approaches to egress and life safety, little or no regard for the non-ambulatory, and no systematic approach to seismic stability. Renovations may not actually demand full compliance with modern standards for all currently mandated safety and accessibility concerns. A systematic code examination of each possible use is needed since a particular rehab scheme may - or may not - trigger requirements to install an automatic sprinkler system, an elevator, accessible restrooms, seismic retrofit, etc.

Below is a list of codes that pertain to renovation projects in Massachusetts:

Code Type	Applicable Code (Model Code Basis)
Building	780 CMR: Massachusetts State Building Code, 8 th Edition 2009 International Building Code 2009 International Existing Building Code
Fire Prevention	527 CMR: Massachusetts Fire Prevention Regulations M.G.L. Chapter 148 Section 26G – Sprinkler Protection
Accessibility	521 CMR: Massachusetts Architectural Access Board Regulations
Electrical	527 CMR 12.00: Massachusetts Electrical Code (2011 National Electrical Code)
Elevators	524 CMR: Massachusetts Elevator Code (2004 ASME A17.1)
Mechanical	2009 International Mechanical Code (IMC)
Plumbing	248 CMR: Massachusetts Plumbing Code
Energy Conservation	2009 International Energy Conservation Code

This study utilizes a streamlined approach to identify key code issues associated with the uses identified in the zoning analysis. The inputs include approximate building areas taken from sketch plans of various uses, ball-park estimates of project cost, and data from the Springfield assessor for areas and assessed valuation. Assessed *building* value is an important metric, since a low ratio between building value and anticipated construction cost may eliminate the need for various upgrades. The following inputs are used to determine the collateral impacts of code compliance on conceptual rehab projects.

- Occupancy classification
- Construction type
- Hazard Category, existing
- Hazard Category, as rehabbed
- Existing building areas
- Rehabbed areas, as percentage of existing area
- Assessed building value
- construction cost, as percentage of assessed value

Based on relationships between these inputs it is possible to make preliminary determinations of code-mandated requirements for sprinklers, elevator, seismic retrofit, additional egress stairs, handicapped accessibility, and required parking for each major use option.

Code analyses on the following pages serve to differentiate the various proposed uses. Some uses are financially swamped by non-productive (but necessary) life-safety improvements and are deemed “not economically feasible”. Other uses appear to be potentially viable, and are identified in red text that reads “building code implication: further examination of use justified”. These indicated uses then proceed to the development modeling phase where project cost and project value are examined.

Potential Uses: Renovated Buildings: Building Code Implications, Parking

1043 Sumner Avenue

Zoning: Residence B

1. Sumner Ave: Single Family Live/Work building code implication: further examination of use justified

Occupancy Classification	Prior	B	Business (fire station)
Occupancy Classification	Rehabbed Portion		Residential 1-2 Family detached (IRC, International Residential Code)
Construction Type	III B (2 hr masonry exterior walls, combustible interior)		
Hazard Category	Prior	4	
Hazard Category	Rehabbed	2	

Required Components of Proposed Use

Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
6,630	4,420	100.0%	\$ 162,300	\$ 200,000	123.2%	no	no	no	no	no	2

	gross*	living	rehabbed	*gross areas per assessor
Basement	2,210			
Porch	-			
1st flr	2,210	2,210	2,210	
2nd flr	2,210	2,210	2,210	
Attic	-			
	6,630	4,420	4,420	

*per assessor

2. Sumner Ave: Two Family Live/Work building code implication: further examination of use justified, parking may be an issue

Occupancy Classification	Prior	B	Business (fire station)
Occupancy Classification	Rehabbed Portion		Residential 1-2 Family detached (IRC, International Residential Code)
Construction Type	III B (2 hr masonry exterior walls, combustible interior)		
Hazard Category	Prior	4	
Hazard Category	Rehabbed Portion	4	

Required Components of Proposed Use

Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
6,630	4,420	100.0%	\$ 162,300	\$ 340,000	209.5%	no	no	no	no	no	4

	gross*	living	rehabbed	*gross areas per assessor	(requires one hour dwelling unit separation)
Basement	2,210	800			
Porch	-				
1st flr	2,210	2,210	2,210		
2nd flr	2,210	2,210	2,210		
Attic	-				
	6,630	5,220	4,420		

3. Sumner Ave: Two-Family building code implication: further examination of use justified

Occupancy Classification	Prior	B	Business (fire station)
Occupancy Classification	Rehabbed Portion		Residential 1-2 Family detached (IRC, International Residential Code)
Construction Type	III B (2 hr masonry exterior walls, combustible interior)		
Hazard Category	Prior	4	
Hazard Category	Rehabbed Portion	4	

Required Components of Proposed Use

Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
6,630	4,420	100.0%	\$ 162,300	\$ 260,000	160.2%	no	no	no	no	no	4

	gross*	living	rehabbed	*gross areas per assessor	(requires one hour dwelling unit separation)
Basement	2,210	800			
Porch	-				
1st flr	2,210	2,210	2,210		
2nd flr	2,210	2,210	2,210		
Attic	-				
	6,630	5,220	4,420		

4. Sumner Ave: Single Family						building code implication: further examination of use justified					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion			Residential 1-2 Family detached		(IRC, International Residential Code)					
Construction Type	III B (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		4								
Required Components of Proposed Use											
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
6,630	4,420	100.0%	\$ 162,300	\$ 220,000	135.6%	no	no	no	no	no	2
	gross*	living	rehabbed	*gross areas per assessor							
Basement	2,210										
Porch	-										
1st flr	2,210	2,210	2,210								
2nd flr	2,210	2,210	2,210								
Attic	-										
	6,630	4,420	4,420								
Oak Street Indian Orchard											
Zoning: Residence B											
1. Oak Street I.O., Two Family Live/Work						building code implication: further examination of use justified					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion			Residential 1-2 Family detached		(IRC, International Residential Code)					
Occupancy Classification	Rehabbed Portion			Home based business							
Construction Type	III B (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		4								
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
11,732	7,344	62.6%	\$ 201,900	\$ 500,000	247.6%	no	no	no	no	no	4
	gross*	living	rehabbed	*gross areas per assessor							
Basement	3,672										
1st Floor	3,672	3,672	3,672								
1st Flr (Stable)	716	-	-								
2nd Floor	3,672	3,672	3,672								
	11,732	7,344	7,344								
2. Oak Street I.O., Residential Apartments						building code implication: further examination of use justified, requires zoning change to Residential C					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed		R-4	Apartments, 6 to 9 units							
Construction Type	III B (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		2								
Required Components of Proposed Use											
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
11,732	7,344	62.6%	\$ 201,900	\$ 1,400,000	693.4%	yes	yes	yes	yes	yes	9
	7,344										
	gross*	living	rehabbed	*gross areas per assessor							
Basement	3,672										
1st Floor	3,672	3,672	3,672								
1st Flr (Stable)	716	-	-								
2nd Floor	3,672	3,672	3,672								
	11,732	7,344	7,344								

3. Oak Street I.O., Artist and Artisans Studios												building code implication: further examination of use justified <i>requires zoning change to Commercial A</i>							
Occupancy Classification	Prior		B	Business (fire station)															
Occupancy Classification	Rehabbed Portion		B	Business (art studios)															
Construction Type	III B (2 hr masonry exterior walls, combustible interior)																		
Hazard Category	Prior		4																
Hazard Category	Rehabbed Portion		4																
Required Components of Proposed Use																			
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces								
11,732	7,344	62.6%	\$ 201,900	\$ 650,000	321.9%	yes	no	no	yes	no	8								
	7,344																		
	gross*	living	rehabbed	*gross areas per assessor															
Basement	3,672																		
1st Floor	3,672	3,672	3,672																
1st Flr (Stable)	716	-	-																
2nd Floor	3,672	3,672	3,672																
	11,732	7,344	7,344																
4. Oak Street I.O., 3 Family Live/Work												building code implication: further examination of use not justified <i>requires same zoning change and code items as apartments</i>							
Occupancy Classification	Prior		B	Business (fire station)															
Occupancy Classification	Rehabbed		R-2	Residential 3 Family															
Construction Type	III B (2 hr masonry exterior walls, combustible interior)																		
Hazard Category	Prior		4																
Hazard Category	Rehabbed Portion		2																
Required Components of Proposed Use																			
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces								
11,732	7,344	62.6%	\$ 201,900	\$ 900,000	445.8%	yes	no	yes	no	yes	6								
	gross*	living	rehabbed	*gross areas per assessor															
Basement	3,672																		
1st Floor	3,672	3,672	3,672																
1st Flr (Stable)	716	-	-																
2nd Floor	3,672	3,672	3,672																
	11,732	7,344	7,344																
Oakland Street																			
												Zoning: Business A							
1. Oakland Street: Restaurant, Office Above												building code implication: further examination of use justified							
Occupancy Classification	Prior		B	Business (fire station)															
Occupancy Classification	Rehabbed Portion		A-2	Retail (restaurant)															
Occupancy Classification	Rehabbed Portion		B	Business (office)															
Construction Type	III B (2 hr masonry exterior walls, combustible interior)																		
Hazard Category	Prior		4																
Hazard Category	Rehabbed Portion		2																
Required Components of Proposed Use																			
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces								
8,340	7,340	88.0%	\$ 182,000	\$ 1,500,000	824.2%	yes	yes	yes	no	yes	27								
	gross*	living	rehabbed	net flr area**	*gross areas per assessor	**for parking calculation													
Basement	1,000																		
1st flr	3,670	3,670	3,670	2,600															
2nd flr	3,670	3,670	3,670	3,000															
	8,340	7,340	7,340																

2. Oakland Street: Medical Offices						building code implication: further examination of use justified					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion		B	Business (medical offices)							
Construction Type	IIB (non-combustible, non-rated)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		4								
Required Components of Proposed Use											
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
8,340	7,340	88.0%	\$ 182,000	\$ 1,500,000	824.2%	yes	yes	no	yes	yes	18
	gross*	living	rehabbed	net flr area**	*gross areas per assessor	**for parking calculation					
Basement	1,000										
1st flr	3,670	3,670	3,670	3,000							
2nd flr	3,670	3,670	3,670	3,000							
	8,340	7,340	7,340								
3. Oakland Street: Retail, Office Above						building code implication: use requires same code upgrades as restaurant					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion		M	Merchantile(retail or cluster of retailers)							
Occupancy Classification	Rehabbed Portion		B	Business (offices)							
Construction Type	IIIB (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		3								
Required Components of Proposed Use											
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
8,340	7,340	88.0%	\$ 182,000	\$ 1,300,000	714.3%	yes	yes	yes	no	yes	15
	gross*	living	rehabbed	net flr area**	*gross areas per assessor	**for parking calculation					
Basement	1,000										
1st flr	3,670	3,670	3,670	3,000							
2nd flr	3,670	3,670	3,670	3,000							
	8,340	7,340	7,340								
4. Oakland Street: Restaurant, Residential Above						building code implication: further examination of use justified					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion		A-2	Retail (restaurant)							
Occupancy Classification	Rehabbed Portion		R-2	Residential (multi family)							
Construction Type	IIIB (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		2								
Required Components of Proposed Use											
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
8,340	7,340	88.0%	\$ 182,000	\$ 1,500,000	824.2%	yes	no	yes	yes	yes	27
	gross	living	rehabbed	net flr area**	*gross areas per assessor	**for parking calculation					approx 20 on-site
Basement	1,000										
1st flr	3,670	3,670	3,670	2,600							
2nd flr	3,670	3,670	3,670	3,000							
	8,340	7,340	7,340								

5. Oakland Street: Assembly, Classroom Above						building code implication: further examination of use justified					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion		A-3	Theater without stage							
Occupancy Classification	Rehabbed Portion		B	Business (education)							
Construction Type	III B (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		2								
Required Components of Proposed Use											
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
8,340	7,340	88.0%	\$ 182,000	\$ 1,700,000	934.1%	yes	yes	yes	yes	yes	23
											approx 20 on-site
		gross	living	rehabbed	net fir area**	*gross areas per assessor	**for parking calculation				
Basement		1,000									
1st flr		3,670	3,670	3,670	2,600	(assume 180 seats)					
2nd flr		3,670	3,670	3,670	3,000						
		8,340	7,340	7,340							

6. Oakland Street: Office, Group Home above						building code implication: further examination of use not justified					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion		B	Business (offices)							
Occupancy Classification	Rehabbed Portion		R-4	Group Residential							
Construction Type	III B (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		2								
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
8,340	7,340	88.0%	\$ 182,000	\$ 1,009,250	554.5%	yes	yes	yes	yes	yes	16
		gross*	living	rehabbed	net fir area**	*gross areas per assessor	**for parking calculation				
Basement		1,000									
1st flr		3,670	3,670	3,670	3,000	20 beds					
2nd flr		3,670	3,670	3,670	3,000						
		8,340	7,340	7,340							

833 Page Boulevard
Zoning: Business A

1. Page Boulevard: Contractors Shop, Office above						building code implication: further examination of use justified					
Occupancy Classification	Prior		B	Business (fire station)							
Occupancy Classification	Rehabbed Portion		F	Factory/Industrial (allows cabinet making, etc.)							
Occupancy Classification	Rehabbed Portion		B	Business (office)							
Construction Type	III B (2 hr masonry exterior walls, combustible interior)										
Hazard Category	Prior		4								
Hazard Category	Rehabbed Portion		3								
Required Components of Proposed Use											
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces
4,914	3,276	66.7%	\$ 80,100	\$ 250,000	312.1%	no	no	yes	no	yes***	5
		gross*	living	rehabbed	net fir area**	*gross areas per assessor	**for parking calculation			***customer areas	
Basement		1,638	1,638								
1st flr		1,638	1,638	1,638	1,200						
2nd flr		1,638	1,638	1,638	1,200						
		4,914	3,276	3,276							

2. Page Boulevard: Offices both floors						building code implication: further examination of use not justified						
Occupancy Classification	Prior		B	Business (fire station)								
Occupancy Classification	Rehabbed Portion		B	Business (medical/dental offices)								
Construction Type	IIB (non-combustible, non-rated)											
Hazard Category	Prior			4								
Hazard Category	Rehabbed Portion			4								
Required Components of Proposed Use												
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces	
4914	3276	66.7%	\$ 80,100	\$ 300,000	374.5%	no	yes	no	no	yes	7	
	gross*	living	rehabbed	net flr area**	*gross areas per assessor **for parking calculation							
Basement	1,638	1,638										
1st flr	1,638	1,638	1,638	1,200								
2nd flr	1,638	1,638	1,638	1,200								
	4,914	3,276	3,276									
3. Page Boulevard: Single Family Live/Work						building code implication: further examination of use justified						
Occupancy Classification	Prior		B	Business (fire station)								
Occupancy Classification	Rehabbed Portion			Residential 1-2 Family detached (IRC, International Residential Code)								
Construction Type	IIIB (2 hr masonry exterior walls, combustible interior)											
Hazard Category	Prior			4								
Hazard Category	Rehabbed			2								
Required Components of Proposed Use												
Building Area	Rehabbed Area	Area Rehabbed	Assessed Building Value	Estimated Construction Cost	Const \$ / Assessed \$	Sprinklers	Elevator	Seismic	Additional Stairway	HC all public areas	Parking Spaces	
6,630	3,276	100.0%	\$ 162,300	\$ 160,000	98.6%	no	no	no	no	no	2	
	gross*	living	rehabbed	*gross areas per assessor								
Basement	1,638	1,638										
1st flr	1,638	1,638	1,638									
2nd flr	1,638	1,638	1,638									
	4,914	3,276	3,276									

6. Scenarios for New Uses

These concepts for development were selected as candidates for further examination after reviewing market data, neighborhood context, zoning regulations, and building code requirements:

Oak Street I.O. Reuse Scenarios

- Two family live-work
- Three family live-work
- Residential apartments
- Artist, artisan, or commercial space (studios)

Sumner Avenue Reuse Scenarios

- Single family live-work
- Two family live-work
- Two family residential

Oakland Street Reuse Scenarios

- Restaurant, office above
- Restaurant, rental residential above
- Medical offices
- Performance, education

Page Boulevard Reuse Scenarios

- Contractor's shop, office above
- Single family live-work

Methodology

The goal of this section is to present a "tree-tops" look at development potential presented in a coordinated display of schematic diagrams, site photos, text, and "numbers".

Drawings and Plans

These rehab schemes include graphics to demonstrate the "fit" of certain uses and to measure areas. The drawings were prepared from photographs of original plans, the City of Springfield GIS mapping, and site photographs. Locations of interior partitions are derived from existing plans and site photos to a level suitable for pre-schematic planning and pro-forma analysis – but they are not intended as a base for detailed construction or design documents. Gross building areas are derived from assessor's data and closely resemble the areas measured from the plans and from limited site measurement. Rentable areas are calculated by CAD from the scaled two dimensional diagrams in the report.

Project Costs

Broad construction categories are chosen to highlight differences between schemes. The costs and overhead anticipate a traditional owner, architect, contractor relationship. An

integrated approach in which a contractor was also the developer and/or owner or architect could save money on these small projects.

The development budgets include:

- Site Purchase
- Sitework (landscaping, parking, etc)
- Exterior Construction (masonry restoration, roofing, windows)
- Interior Construction
 - Code/ADA Construction items (seismic, sprinklers, elevator, accessibility, stairway) as indicated in the code analysis
 - Use-specific interior Construction by general per foot allowance
- General Conditions and Contingency
- Soft Costs

Soft Costs for all of the schemes are taken as a percentage of the total construction cost, in this case 30% for most projects, somewhat less for simple residential and live/work projects. This line covers professional fees, developer's overhead, builders risk and other required insurance, marketing and promotion, financing fees, and interest during the construction period, etc. An owner/contractor/developer could avoid some of these expenses, or absorb them into general overhead.

Environmental and Structural Issues

The authors of this study were not presented with any information about environmental conditions at the fire station sites. The budgets in the report should not be assumed to cover remediation costs. No analysis of the buildings' structural systems or condition was conducted or presented to the authors of this study.

Site Acquisition Costs

For analysis purposes the current assessed value functions as a "place-holder" for the ultimate purchase price. The final sales price, or lease terms, will result from considerations including restoration expenses and neighborhood benefits. The site purchase price may be higher or lower than the assessed value.

Income and Expenses

Rental income is based upon current market data presented earlier in this report in Chapter 2. Vacancy rates assume a well-received project in a stable economic environment. Although the projects would come on-line several years out, to avoid introduction of another layer of variables neither project costs nor income/expense are adjusted for forward inflation. At this "tree-tops" level of analysis it is assumed that near-term cost inflation will be roughly balanced by rent/income escalation.

Rental rates are based on the market research, with consideration given for new space. Operating expenses are rough estimates based on comparable small properties. Retail rent is shown triple net, office rent is typically modified gross.

Project Cost and Financing

For income producing projects, this report makes a rough estimate of the amount a property owner could borrow to finance the completed project. The debt/equity ratio is a function of prevailing commercial interest rates and the appraised value of the completed property. The proformas assume coverage at 70% of the completed property's value for commercial (office or retail) properties, and 75% for apartment properties. The completed value is derived by capitalizing the net operating income at a rate appropriate for the use. The gap between what a lender would probably fund, and what the owner will spend is indicated, with the large caveat that the gap is based on many assumptions, and could vary widely based on relatively minor percentage changes in large budget or income items.

Owner-occupied residential projects are typically valued by comparison to comparable properties, with borrowing limits set accordingly, typically at 75% to 90% loan-to-value. Value of the completed one and two-family projects is estimated as if seen from a hypothetical banker's viewpoint. The values are somewhat optimistic compared to recent housing sales in Springfield. The work-space component is considered to add real value, especially since it has fifteen foot ceilings and more cache than most home offices and studios. Live-work owners also can save the rent that they would have spent on studio, work-shop, or office space, allowing them to spend more on their overall mortgage. Some lenders are able to see this logic, even if comparables are few.

The proformas include a line for "owner's equity" that assumes the owner or developer would fund at least 20% of the hard and soft development costs with their own money, above and beyond funds derived from tax credits, if credits were used. Lenders will often consider funds derived from tax credits as owner's equity, but in most of the cases in the report, some additional equity appears to be required beyond the credits.

Tax credits (Historic, Low Income, and New Markets) and other funding sources are discussed in the final section of this report.

6.1 Oak Street I.O. Reuse Scenarios

Evaluation of four scenarios that appear feasible from neighborhood, zoning, and code criteria:

- Two family live-work
- Three-family live-work, with a Residential C zoning change
- Residential apartments, with a Residential C zoning change
- Studio or commercial space, with a Commercial A zoning change

Notes, Oak Street I.O. Re-use Scenarios

- Construction budgets assume that the tower remains. Its size is reflected in the in the exterior construction item.
- Most projects will require parking in the side yard
- The basement and former stable (long neck that extends towards Berkshire Street) are not considered to be renovated space, unless noted otherwise.

Oak Street Indian Orchard: Features and Existing Conditions



This fire station anchors the corner of Oak and Berkshire streets.

The site offers space for parking at the front (as seen above), in the 50 foot wide side yard, and potentially in the one story stable, which is built into the hillside at the rear of the lot.





The garage bay at left was a later addition and improves the building proportions.



Some windows are blocked, but the infill is easily removed.



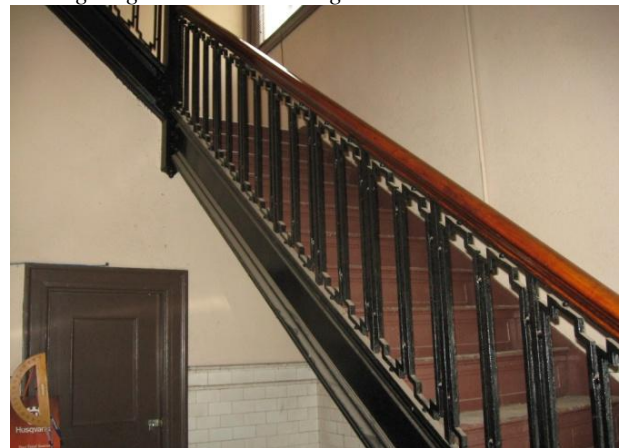
Ground floor garage space – looking towards the Oak Street roll-up doors.



Ground floor garage space – looking towards the back – side garage door is on the right



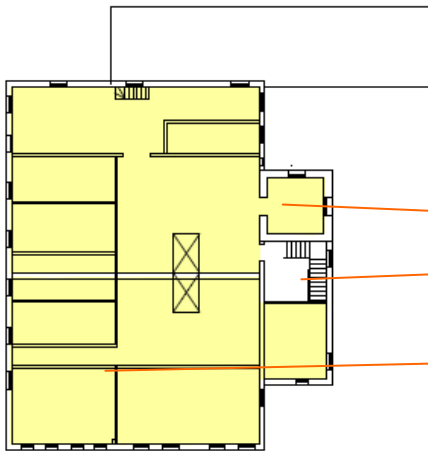
Large skylight over upstairs common room – original woodwork and partitions are largely intact.



Stairway to second level.

Oak Street I.O.

Re-use Scenario: Two family live-work



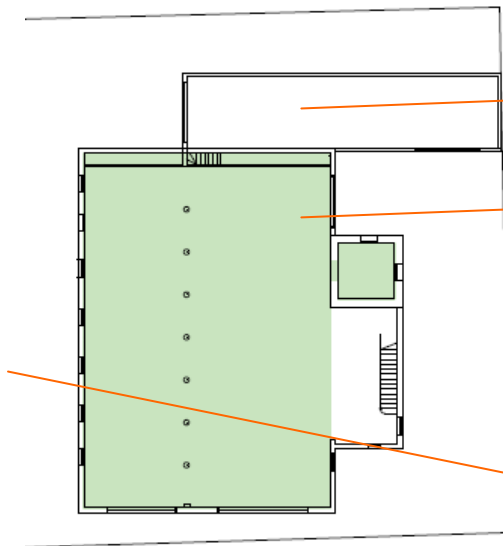
2nd Floor

Two large apartments on the second floor contain approximately 1,550 s.f. each.

Space extends into the fire tower.

Only one means of egress is required. The original iron-work stair is retained.

Some original portions may be reused.

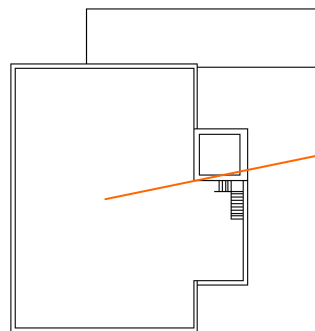


1st Floor

The stable would be available for studio expansion or garage parking.

The entire first level is used for studio (home-based business) activities. The two owners could partition the 3,100 s.f. space as they required. The former fire truck garage has high floor load capacity, street level access, good natural light and large overhead doors. As such it is an unusual space to find in conjunction with the domestic scale of the second floor.

In this use it may be possible to avoid parking in the side yard, and retain it for recreation and gardening.



Basement

The basement is not developed for usable area in this scenario.

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

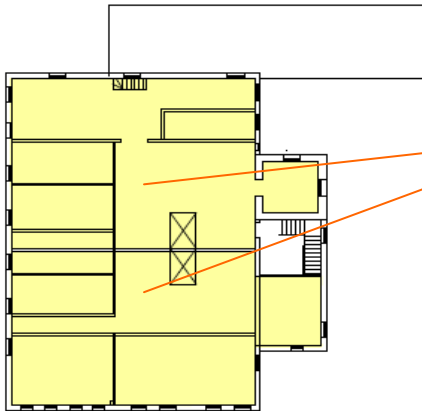
Oak Street I.O.

Project economics: Two family live-work

This project benefits from very simple code requirements. The sheer size of the units adds to their cost, which can only be partly covered with bank debt. Historic tax credits are not available for owner-occupied housing. Developed as a two-unit condominium by its owners, this project might appeal to well-funded individuals with a desire to live and work in a historic building with excellent studio space and additional room to grow or store completed work in the stable and basement.

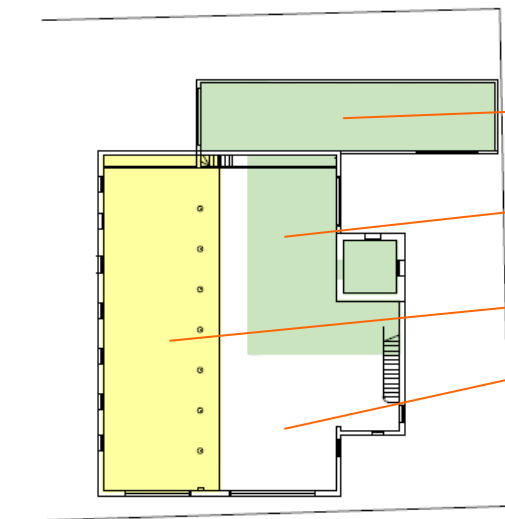
Development Costs			
Site Purchase (1)			230,600
Construction			
	Site Work		20,000
	Exterior Construction		63,000
	Interior Construction		
		ADA, code	-
		Studio, 1st	73,000
		Living, 2nd	239,000
	Subtotal Construction		\$ 395,000
		General Conditions	\$ 47,000
		Contingency	44,000
Total Construction			486,000
Soft Costs			\$ 150,000
Total Project Costs			\$ 866,600
Estimated lender valuation:		\$500,000	
Funding Sources:			
	Commercial loan (2)		\$ 400,000
	Owner's equity (3)	20%	\$ 127,000
Total funding available			\$ 527,000
Preliminary estimate of funding gap: (4)			340,000
Notes:			
(1)	Assessed value as a "place-holder"		
(2)	Based on 80% of estimated lender valuation		
(3)	Assumes owner/developer funds 20% of hard and soft costs		
(4)	Total project cost minus available funding, rounded		

Re-use Scenario: Three family live-work



2nd Floor

Two loft-style residential units at this level, with approximately 1,550 s.f. each. They could each contain some studio or work space - additional work space is available on the ground level.



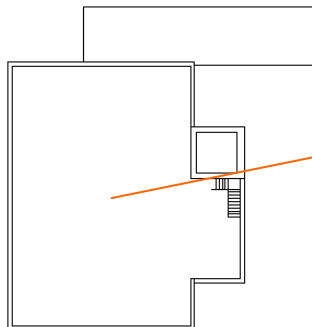
1st Floor

The stable can be used for 600 s.f. of workshop area.

Demised studio space, approximately 900 s.f.

Third residential unit, approximately 1,500 s.f.

Flex space - potential for use by residents or as display space occasionally open to the public.



Basement

The basement is not developed for usable area in this scenario.

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

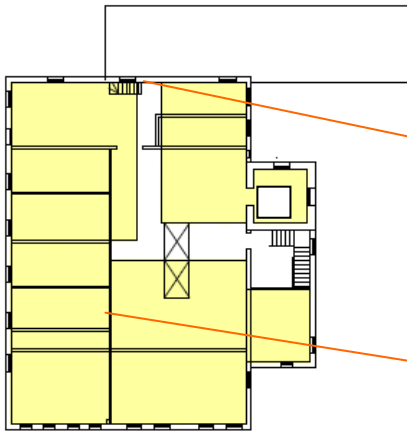
Oak Street I.O.**Project economics****Three family live-work rental**

This project may be attractive to a development entity able to utilize historic tax credits. Code requirements include sprinklers and seismic retrofit. The financing gap could be closed by site purchase reduction. The project depends on identifying a niche rental market. It is modeled as rentals in the proforma below. If sold as condos it would not benefit from the tax credits.

Development Costs				
Site Purchase	(1)			230,600
Construction				
	Site Work			20,000
	Exterior Construction			63,000
	Interior Construction			
		ADA, code		98,000
		Studio		89,000
		Living		440,000
	Subtotal Construction			\$ 710,000
		General Conditions		\$ 85,000
		Contingency		80,000
Total Construction				875,000
Soft Costs				\$ 260,000
Total Project Costs				\$ 1,365,600
Income/Expense				
	Live/work rental	3	\$ 2,200	79,200
Rental Income				\$ 79,200
	Vacancy			(3,960)
	Expenses, apartments			(12,000)
	Expenses, studios			(3,000)
Net Operating Income				\$ 60,240
Potential Funding Sources:				
	Commercial loan (2)			\$ 650,000
	Owner's equity (3)	20%		\$ 227,000
	Historic Tax Credits (fed) (4)			\$ 140,000
	Historic Tax Credits (MA) (4)			\$ 140,000
Total funding available:				\$ 1,157,000
Preliminary estimate of funding gap: (5)				210,000
Notes:				
(1)	Assessed value as a "place-holder"			
(2)	Based on debt service equivalent to 70% of NOI			
(3)	Assumes owner/developer funds 20% of hard and soft costs			
(4)	Assumed present value of credits utilized over time			
(5)	Total project cost minus available funding, rounded			

Oak Street I.O.

Re-use Scenario: Rental apartments

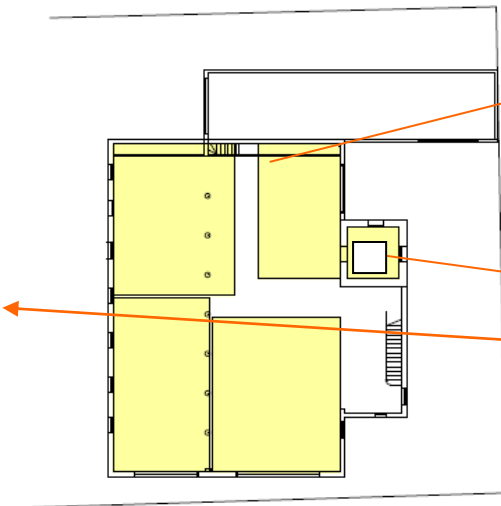


2nd Floor

The required second means of egress may be to the roof of the stable which meets grade at the rear of the lot.

Four apartments on this level. As drawn they range from 560 to 1,000 s.f. each.

Some existing partitions and woodwork may be retained.

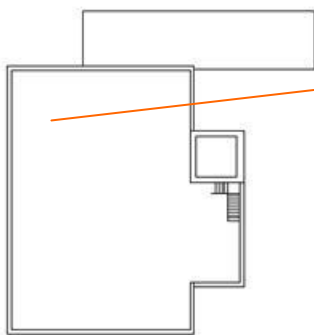


1st Floor

Four apartments at the ground level. The high ceilings suit them for loft-style layouts. They have between 500 and 800 s.f. as drawn.

Elevator incorporated into the tower

Parking for the required spaces could be accommodated in the side yard, with additional parking available in the paved area in front of the building.



Basement

The basement is not developed for usable area in this scenario. It could potentially be used for tenant storage or laundry.

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Oak Street I.O.

Project economics

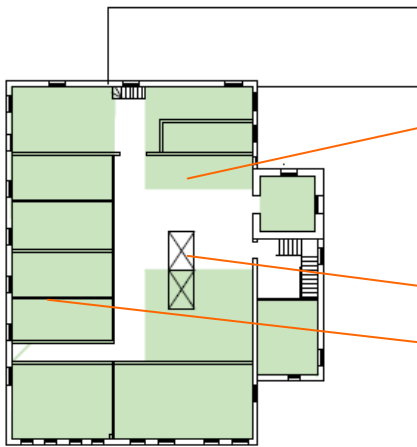
Rental apartments

This project could probably rent towards the upper end of the standard apartment market if designed as loft-style units incorporating the high ceilings and unique building features. Code requirements include sprinklers, seismic retrofit and an elevator. The funding gap could be less for a contractor/developer, and still less if the elevator could be avoided.

Development Costs			
Site Purchase (1)			230,600
Construction			
Site Work			30,000
Exterior Construction			63,000
Interior Construction			
ADA, code			262,000
Apartment 1st			312,000
Apartment 2nd			312,000
Subtotal Construction			\$ 979,000
General Conditions			\$ 117,000
Contingency			110,000
Total Construction			1,206,000
Soft Costs			\$ 360,000
Total Project Costs			\$ 1,796,600
Income/Expense			
One bed units	2		22,800
Two bed+ units	4		52,800
Three bed units	2		28,800
Rental Income			\$ 104,400
Vacancy			(5,220)
Expenses, apartments			(36,000)
Net Operating Income			\$ 63,180
Potential Funding Sources:			
Commercial loan (2)			\$ 680,000
Owner's equity (3)	20%		\$ 359,320
Historic Tax Credits (fed) (4)			\$ 190,000
Historic Tax Credits (MA) (4)			\$ 190,000
Total funding available:			\$ 1,419,320
Preliminary estimate of funding gap: (5)			380,000
Notes:			
(1)	Assessed value as a "place-holder"		
(2)	Based on debt service equivalent to 70% of NOI		
(3)	Assumes owner/developer funds 20% of hard and soft costs		
(4)	Assumed present value of credits utilized over time		
(5)	Total project cost minus available funding, rounded		

Oak Street I.O.

Re-use scenario: Studio and creative office space

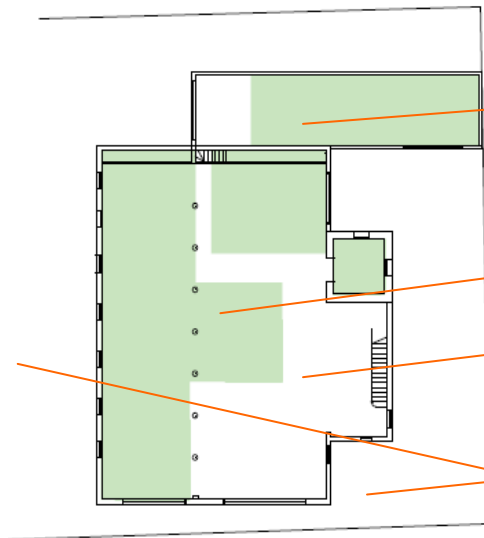


2nd Floor

The rentable spaces total 2,600 s.f. at this level. The green shading connotes areas that are partitioned for rental to a variety of small businesses - which could include artists, artisans, accountants, writers, programmers, etc.

Existing skylights are an asset.

Small work spaces could utilize existing partitions.



1st Floor

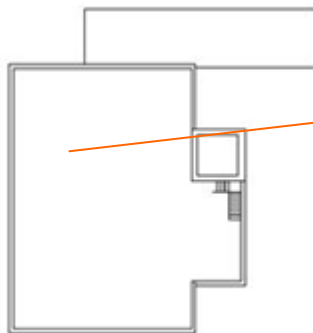
The stable is potentially usable for workshop space

The partitioned rentable spaces total 2,500 s.f. at the ground level - in this trial scheme.

The main garage space could be divided in many ways, or rented undivided to a group of users.








The unshaded area indicated common area - located so that it could be accessible to the public and visible from the street.

Parking for the required spaces could be accommodated in the side yard, with additional parking available in the paved area in front of the building.



Basement

The basement is not shown as occupied in this scheme. It could potentially provide storage space for tenants.

	Retail Restaurant
	Office
	Studio
	Residential
	Performance
	Educational
	Industrial

Oak Street I.O.

Project Economics

Studio and creative office space

This project would rent towards the top of the studio market since it includes compact spaces upstairs, sculpture spaces on the ground level, and interesting common areas. It is difficult to compete with surplus industrial space, however. Code requirements, finishes and systems are minimal. The project could be eligible for historic tax credits. Historic review favors projects that retain interior features, which is natural for this type of use.

Development Costs			
Site Purchase (1)			230,600
Construction			
Site Work			25,000
Exterior Construction			63,000
Interior Construction			
ADA, code			79,000
Studio, 1st			131,000
Studio, 2nd			110,000
Subtotal Construction			\$ 408,000
General Conditions			\$ 49,000
Contingency			46,000
Total Construction			503,000
Soft Costs			\$ 150,000
Total Project Costs			\$ 883,600
Income/Expense			
Work space, Ground flr	2,500	\$ 8	20,000
Work Space, 2nd flr	2,600	\$ 8	20,800
Rental Income			\$ 40,800
Vacancy			(2,040)
Expenses, studios			(24,000)
Net Operating Income			\$ 14,760
Potential Funding Sources:			
Commercial loan (2)			\$ 160,000
Owner's equity (3)	20%		\$ 130,600
Historic Tax Credits (fed) (4)			\$ 80,000
Historic Tax Credits (MA) (4)			\$ 80,000
Total funding available:			\$ 450,600
Preliminary estimate of funding gap: (5)			430,000
Notes:			
(1)	Assessed value as a "place-holder"		
(2)	Based on debt service equivalent to 70% of NOI		
(3)	Assumes owner/developer funds 20% of hard and soft costs		
(4)	Assumed present value of credits utilized over time		
(5)	Total project cost minus available funding, rounded		

6.2 Sumner Avenue Reuse Scenarios

Evaluation of three scenarios that are potentially feasible according to zoning and code analyses:

- Single family live-work
- Two family live-work
- Two family residential

Notes, Sumner Avenue Schemes

- The completed projects are assumed to be owner-occupied
- None of the proposed uses could benefit from historic tax credits or affordable housing credits.

1043 Sumner Avenue: Building Features and Existing Conditions



View of neighborhood from upper level covered porch

The station has attractive facades facing both streets, with garage doors at front and side, and two entry doors on Howes Street. The design successfully blends references to brick firehouses and also to the light-colored, gable-roofed houses in the neighborhood.



Garage at first floor has glazed tile walls, ample daylight and 15' foot ceilings.



The upper interior is 28 feet wide with clear span ceiling and windows on all four sides.



Light wells at basement provided ventilation to the hose drying area and kitchen/dining room.



Side elevation and neighbor's driveway. Existing wood windows have aluminum storm sash.



Basement stairs, glassed-in office

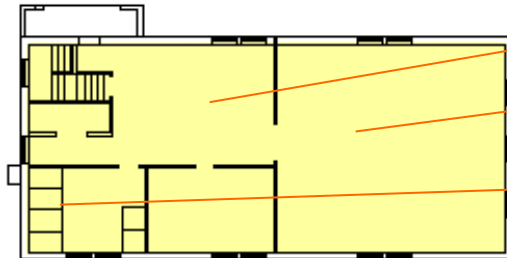


Potential areas for on-site parking

A garage facing Sumner is possible, but uses a lot of space to park one car. Parking in the Sumner Avenue driveway may also be possible.

The existing garage door on Howes Street could accommodate one car. A driveway behind the building could park one car, or two if tandem.

2nd Floor



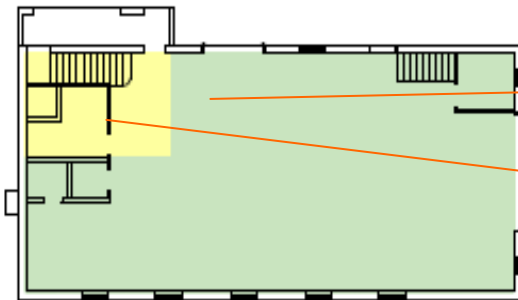
1,800 s.f. living area

Ceiling is clear-span across the 28' width of the interior.

Some existing partitions, woodwork and materials such as slate bathroom partitions may be retained or repurposed.

Parking for two cars is located in the side and front driveways.

1st Floor

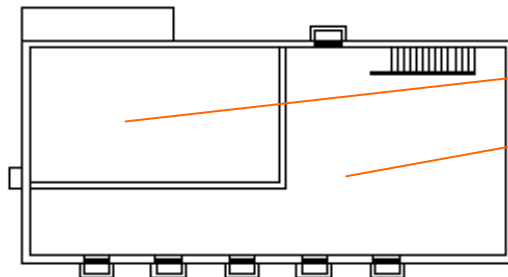


1,550 s.f. work space (studio, office)

250 s.f. living area at entry








Existing wood windows have aluminum storms and may not need replacement.

Basement



Furnace room

Space formerly used for kitchen and hose drying

-  Retail Restaurant
-  Office
-  Studio
-  Residential
-  Performance
-  Educational
-  Industrial

Sumner Avenue

Project economics

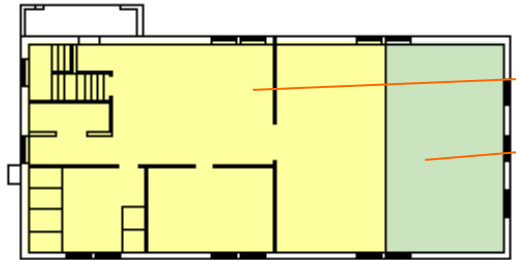
Single family live-work

This use fits well into the building and into the neighborhood. The live-work renovation costs less than a comparable residential rehab, since work space can use the ground level virtually as-is. The inclusion of work space is reflected in the lenders valuation and borrowing amount. The construction costs could be reduced by sweat-equity, re-use of existing building features, and project management by an informed owner.

Development Costs							
Site Purchase	(1)			\$	231,000		
Construction							
		Site Work			5,000		
		Exterior Construction			39,000		
		Interior Construction					
		ADA, code			-		
		Studio, 1st			49,000		
		Living, 2nd			88,000		
		Subtotal Construction		\$	181,000		
		General Conditions			22,000		
		Contingency			20,000		
Total Construction					\$	223,000	
Soft Costs					\$	56,000	
Total Project Costs					\$	510,000	
Estimated lender valuation:			\$275,000				
Funding Sources:							
		Commercial loan (2)		\$	220,000		
		Owner's equity (3)	20%	\$	49,000		
Total funding available					\$	269,000	
Preliminary estimate of funding gap (4)					\$	240,000	
Notes:							
(1)	Assessed value as a "place-holder"						
(2)	Based on 80% of estimated lender valuation.						
(3)	Assumes owner/developer funds 20% of hard and soft costs						
(4)	Total project cost minus available funding, rounded						

Sumner Avenue

Re-use Scenario: Two family live-work

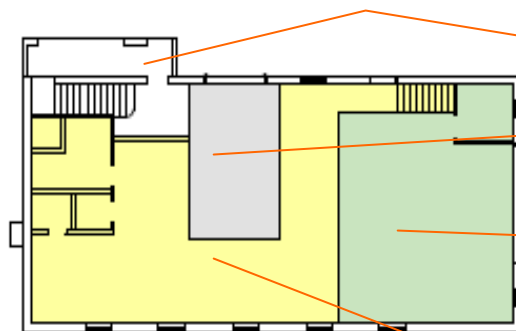


2nd Floor

1,350 s.f. living area, as shown

450 s.f. work space. Space allocations are flexible.

Skylights and opening up the attic are possibilities



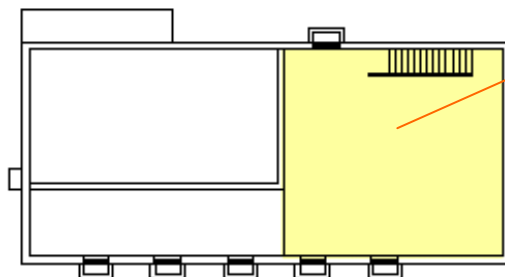
1st Floor

Units share a common front entry

One space of inside parking is necessary and uses an existing garage door opening.

560 s.f. work space (studio, office) with street exposure. Space allocations are flexible since the garage is clear-spanned with no columns.

680 s.f. living area at this level



Basement

800 s.f. area for additional bedrooms

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Sumner Avenue

Project economics

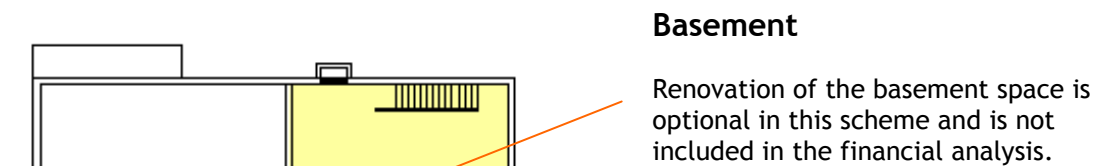
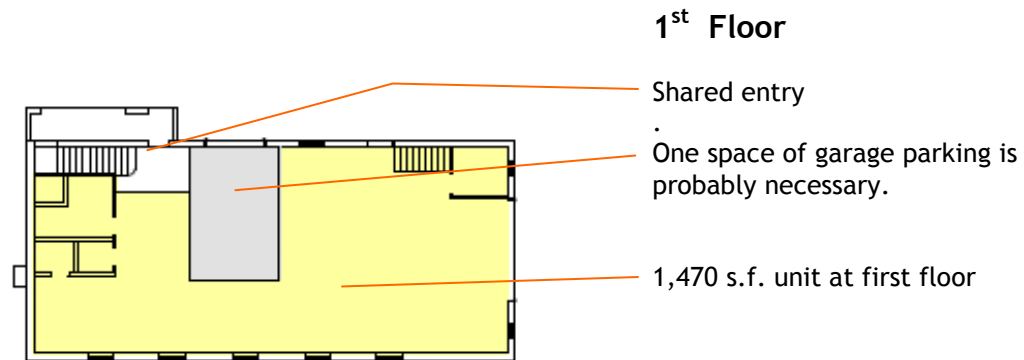
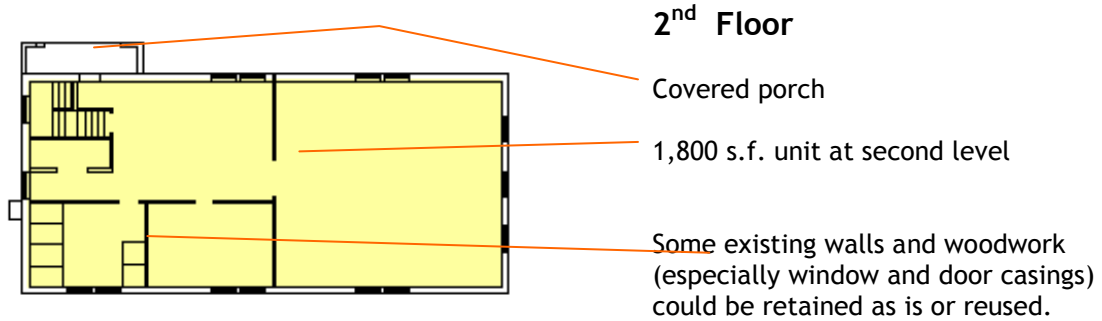
Two family live-work

The neighborhood favors single family development, but zoning allows two family housing. The construction cost is increased by the interior garage. The plan includes finishing the former kitchen area in the basement into bedroom space, a drawback of this scheme which would be reflected in its value. The financing gap may be partially closed by an owner/development who rents out one of the units.

Development Costs					
Site Purchase (1)				\$	231,000
Construction					
	Site Work				10,000
	Exterior Construction				39,000
	Interior Construction				
		ADA, code			-
		Basement			28,000
		1st floor			99,000
		2nd floor			99,000
	Subtotal Construction			\$	275,000
		General Conditions			33,000
		Contingency			31,000
Total Construction				\$	339,000
Soft Costs				\$	85,000
Total Project Costs				\$	655,000
Estimated lender valuation:		\$ 300,000			
Funding Sources:					
	Commercial loan (2)			\$	240,000
	Owner's equity (3)	20%		\$	85,000
Total funding available				\$	325,000
Preliminary estimate of funding gap: (4)				\$	330,000
Notes:					
(1)	Assessed value as a "place-holder"				
(2)	Based on 80% of estimated lender valuation				
(3)	Assumes owner/developer funds 20% of hard and soft costs				
(4)	Total project cost minus available funding, rounded				

Sumner Avenue

Re-use Scenario: Two family residential



- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Sumner Avenue**Project economics****Two family residential**

This is a two level duplex with a garage included on the first level. It does not need to extend into the basement like the live-work duplex and is marginally less expensive than the live-work duplex. Two-families tend to sell for low prices in East Forest Park, which is reflected in the lower lender valuation and in the neighbors' preference for single family development.

Development Costs					
Site Purchase (1)				\$	231,000
Construction					
	Site Work				10,000
	Exterior Construction				39,000
	Interior Construction				
		ADA, code			-
		Basement			-
		Studio, Garage, 1st			111,000
		Living, 2nd			<u>111,000</u>
	Subtotal Construction			\$	271,000
		General Conditions			33,000
		Contingency			<u>30,000</u>
Total Construction				\$	334,000
Soft Costs				\$	<u>84,000</u>
Total Project Costs				\$	649,000
Estimated lender valuation:		\$250,000			
Funding Sources:					
	Commercial loan (2)			\$	200,000
	Owner's equity (3)		20%	\$	<u>84,000</u>
Total funding available				\$	284,000
Preliminary estimate of funding gap: (4)				\$	370,000
Notes:					
(1)	<i>Assessed value as a "place-holder"</i>				
(2)	<i>Based on 80% of estimated lender valuation</i>				
(3)	<i>Assumes owner/developer funds 20% of hard and soft costs</i>				
(4)	<i>Total project cost minus available funding, rounded</i>				

6.3 Oakland Street Reuse Scenarios

Evaluation of four scenarios that are potentially feasible according to the zoning and code analyses:

- Restaurant, office above
- Restaurant, rental residential above
- Medical offices, both floors
- Theater, classroom above

Notes, Oakland Street Scenarios

- This is the only fire station in the group that may have some re-usable electrical and mechanical systems.
- Retail use could be substituted for restaurant use in two of the scenarios.

Oakland Street Features and Existing Conditions



This station had good exposure from all approaches.

The monumental building and its monumental evergreen have the potential to turn this into a very attractive intersection.



The building's architectural exuberance reflects the style and wealth of Springfield's Victorian era.



There is room in the side yard for approximately 15 parking spaces. The lot enters from Oakland St.



The 1960's hose tower might be re-purposed as an elevator shaft. The entry is to the left of the tower.



View towards the roll-up doors in the main truck garage. At least one column must remain.



Standing in the firemen's common room, looking towards the front.



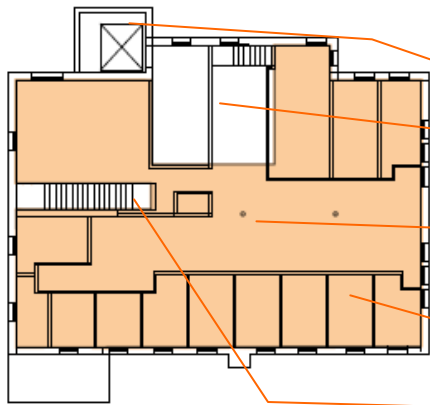
New mechanical systems were installed in the 1960's. Most of the basement was walled off and filled in.



Standing in the firemen's common room, looking towards the rear.

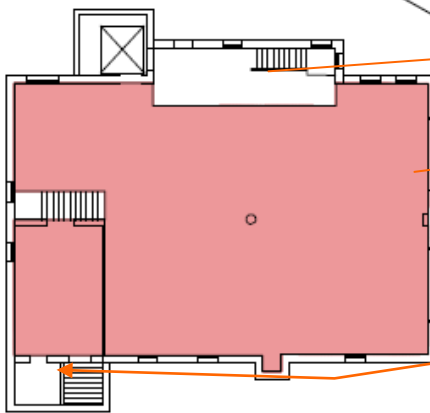
Oakland Street

Re-use Scenario: Restaurant, office above



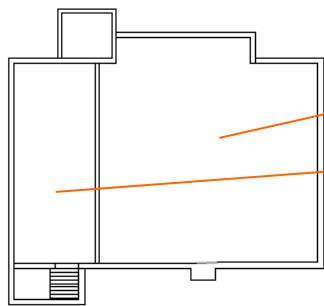
2nd Floor Office

- Elevator within existing hose tower
- Common area for restrooms, stairway and elevator
- Approximately 2,600 s.f. of rentable office area, shown shaded, with ample windows, and minimal columns
- Existing partitions are shown - some may be useful in certain types of reuse.
- New egress stair to ground level



1st Floor Restaurant

- Lobby for office space, possibly shared with the restaurant.
- Approximately 2,900 s.f. of high-ceiling restaurant space, including kitchen. Various entry locations are possible.
- Glass overhead doors are features of many restaurants.
- Kitchen/loading entry
- Parking area on-site



Basement

- Most of the basement was filled with gravel and walled off
- The remaining basement area is a window-less mechanical space

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Oakland Street

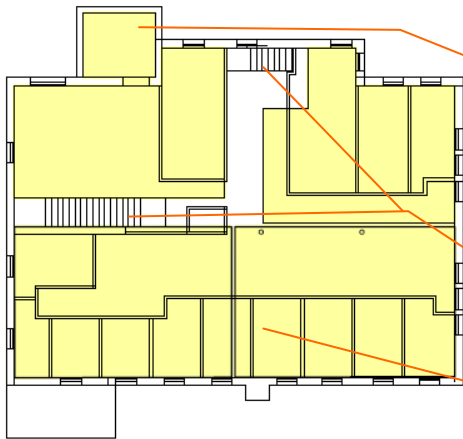
Project economics

Restaurant, office above

This could be a good restaurant location for the right independent operator or chain. The budget below includes a restaurant space ready to function, with final finishes by the tenant. The costs include seismic retrofit, sprinklers, and an elevator. Rent for the renovated restaurant space is modeled \$15, net, at the higher end of local retail rent, based on new space at a busy intersection. Office rent is fairly low in Springfield, and is taken at \$12, also on a net basis.

Development Costs				
Site Purchase	(1)			\$ 271,300
Construction				
	Site Work			40,000
	Exterior Construction			80,000
	Interior Construction			
		ADA, code, environmental		255,000
		Restaurant		367,000
		Office		<u>220,000</u>
		Subtotal Construction		\$ 962,000
		General Conditions		115,000
		Contingency		<u>108,000</u>
		Total Construction		\$ 1,185,000
		Soft Costs		<u>360,000</u>
		Total Project Costs		\$ 1,816,300
Income/Expense				
	Restaurant Rent	3,000	\$ 15	45,000
	Office Rent	2,600	\$ 12	<u>31,200</u>
	Rental Income			\$ 76,200
		Vacancy		(3,810)
		Expenses, retail/rest (nnn)		(3,000)
		Expenses, office (nnn)		<u>(2,600)</u>
		Net Operating Income		\$ 66,790
Potential Funding Sources:				
	Commercial loan (2)			\$ 720,000
	Owner's equity (3)	20%		\$ 363,260
	Historic Tax Credits (fed) (4)			\$ 190,000
	Historic Tax Credits (MA) (4)			<u>\$ 190,000</u>
	Total funding available:			\$ 1,463,260
	Preliminary estimate of funding gap: (5)			\$ 350,000
Notes:				
(1)	Assessed value as a "place-holder"			
(2)	Based on debt service equivalent to 70% of NOI			
(3)	Assumes owner/developer funds 20% of hard and soft costs			
(4)	Assumed present value of credits utilized over time			
(5)	Total project cost minus available funding, rounded			

Re-use Scenario: Restaurant, residential above



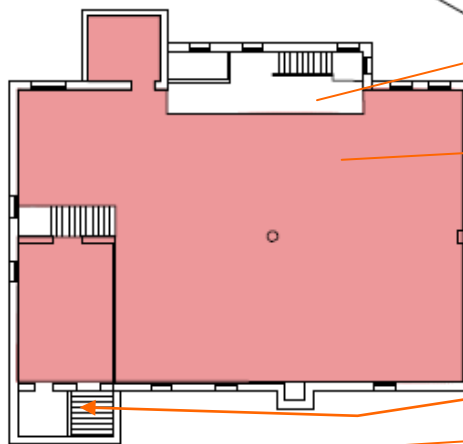
2nd Floor Apartments

The hose tower can become part of one apartment - but will need a window

Apartments fit easily. As laid out in this sketch plan, they contain approximately 2,800 s.f. of space in four units. Two 2-bed and two 1-bed in this sketch.

A second egress stair is required. The handsome existing stairway is retained.

Existing partitions are shown, some may be reusable



1st Floor Restaurant

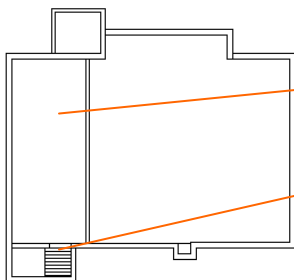
Lobby for residential space, probably not shared with the restaurant.

Approximately 3,000 s.f. of high-ceiling restaurant space, including kitchen. Various entry locations are possible.

Glass overhead doors are features of many restaurants, and could be operable in the summer.

Kitchen/loading entry

Parking area on-site



Basement

Most of the basement was filled with gravel and walled off

The basement has a walk-out exit into the parking area.

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Oakland Street

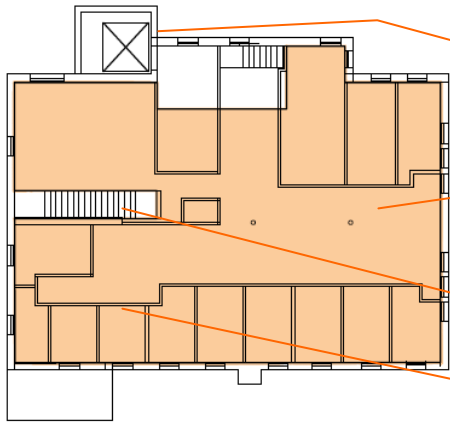
Project economics Restaurant, residential above

Rent for the four apartments is at local market levels. Costs include seismic retrofit, sprinklers and an additional egress stair. The net operating income is similar to the previous scenario. Apartments cost more to build out than office space, but do not require an elevator.

Development Costs				
Site Purchase (1)				\$ 271,300
Construction				
Site Work				40,000
Exterior Construction				80,000
Interior Construction				
ADA, code				140,000
Restaurant				367,000
Apartments				<u>312,000</u>
Subtotal Construction				\$ 939,000
General Conditions				113,000
Contingency				<u>\$ 105,000</u>
Total Construction				\$ 1,157,000
Soft Costs				<u>\$ 350,000</u>
Total Project Costs				\$ 1,778,300
Income/Expense				
Restaurant Rent	3,000	\$ 15		45,000
One bed units	2			22,800
Two bed+ units	2			<u>26,400</u>
Rental Income				\$ 94,200
Vacancy				(4,710)
Expenses, retail/rest (nnn)				(3,000)
Expenses, apts				<u>(18,000)</u>
Net Operating Income				\$ 68,490
Potential Funding Sources:				
Commercial loan (2)				\$ 740,000
Owner's equity (3)	20%			\$ 355,660
Historic Tax Credits (fed) (4)				\$ 180,000
Historic Tax Credits (MA) (4)				<u>\$ 180,000</u>
Total funding available:				\$ 1,455,660
Preliminary estimate of funding gap: (5)				\$ 320,000
Notes:				
(1)	<i>Assessed value as a "place-holder"</i>			
(2)	<i>Based on debt service equivalent to 70% of NOI</i>			
(3)	<i>Assumes owner/developer funds 20% of hard and soft costs</i>			
(4)	<i>Assumed present value of credits utilized over time</i>			
(5)	<i>Total project cost minus available funding, rounded</i>			

Oakland Street

Re-use Scenario: Medical offices



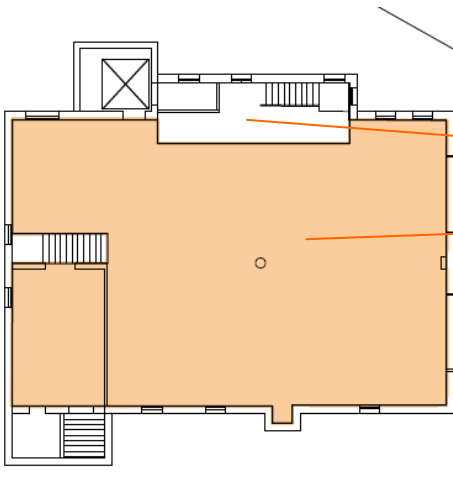
2nd Floor Office

Elevator within existing hose tower
Lobby area for stairway and elevator

Approximately 2,900 s.f. of rentable office area, shown shaded. Restroom space is assumed to within the demised spaces for medical space tenants.

Additional egress stair to ground level

Existing partitions are shown - some may be useful in certain types of reuse.



1st Floor Office

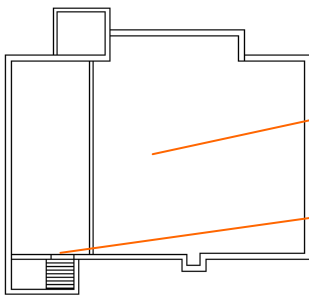
Main entry lobby for upper level space. Lower level space can enter from several directions.

Approximately 2,800 s.f. of office/reception or clinic space with high ceilings, glass garage doors, on a very prominent corner with some on-site parking and good public transit. Grade level access, very high floor load capacity.

Basement

Most of the basement was filled with gravel and walled off. There is no potential for basement storage.

The basement has a walk-out exit into the parking area.



- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Oakland Street

Project economics

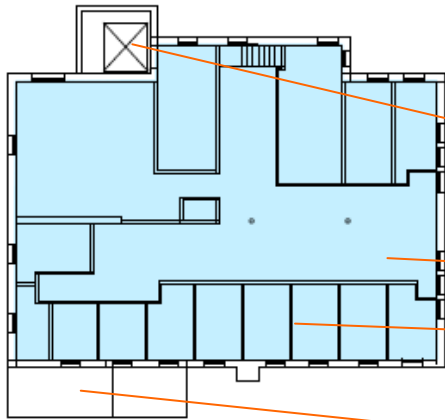
Medical offices

Medical office space would benefit from the on-site parking and the location on bus routes. If built-out for a specific tenant it could potentially generate the upper range rent rate that this proforma uses. It is shown on both floors. Historic tax credits might be of interest to a group of investor/tenants.

Development Costs				
Site Purchase (1)				\$ 271,300
Construction				
	Site Work			40,000
	Exterior Construction			80,000
	Interior Construction			
		ADA, code, environmental		229,000
		Office, 1st flr		367,000
		Office, 2nd flr		<u>330,000</u>
	Subtotal Construction			\$ 1,046,000
		General Conditions		126,000
		Contingency		<u>117,000</u>
Total Construction				\$ 1,289,000
Soft Costs				<u>\$ 390,000</u>
Total Project Costs				\$ 1,950,300
Income/Expense				
	Office Rent	3,000	\$ 16	48,000
	Office Rent flr 2	3,000	\$ 16	<u>48,000</u>
Rental Income				\$ 96,000
	Vacancy			(4,800)
	Expenses, office(nnn)			<u>(9,000)</u>
Net Operating Income				\$ 82,200
Potential Funding Sources:				
	Commercial loan (2)			\$ 890,000
	Owner's equity (3)	20%		\$ 390,060
	Historic Tax Credits (fed) (4)			\$ 210,000
	Historic Tax Credits (MA) (4)			<u>\$ 210,000</u>
Total funding available:				\$ 1,700,060
Preliminary estimate of funding gap: (5)				\$ 250,000
Notes:				
(1)	Assessed value as a "place-holder"			
(2)	Based on debt service equivalent to 70% of NOI			
(3)	Assumes owner/developer funds 20% of hard and soft costs			
(4)	Assumed present value of credits utilized over time			
(5)	Total project cost minus available funding, rounded			

Oakland Street

Re-use Scenario: Performance, education



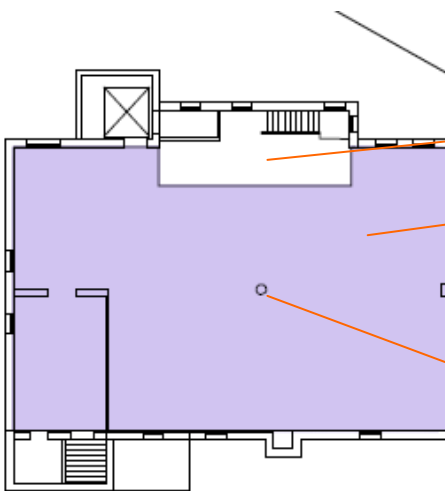
2nd Floor teaching, rehearsal, gallery, admin, etc.

This use requires an elevator. Restrooms for the performance space could potentially be on this level.

3,200 s.f. of flexible space with ceilings over 10'

Existing woodwork and partitions may be reused where appropriate.

The second means of egress may need to be outside the building, depending on the space needs of the performance space.



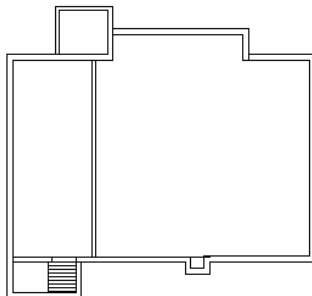
1st Floor

Lobby area.

Performance space with 15' ceilings, high floor load capacity, and multiple exit points. Total area shaded: approx. 2,900 s.f. When ancillary spaces are subtracted, about 2,200 s.f. remains for stage and seating. Capacity is estimated at 150 seated

One single column must remain.

Sound insulation of the overhead doors is required. At least one should remain operable for moving equipment in and out.



Basement

Per notes on previous schemes, the basement is not usable for program or storage purposes. It can house additional mechanical equipment.

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Oakland Street

Project economics

Performance, education

Zumix, included in the case-study examples, is the model for the proforma below. Construction costs include a full complement of code items and elevator, as well as construction of an external egress stair, sound proofing, and fit-out. The ground floor is envisioned as a performance space open to the public, with education space above. Funding could potentially include New Markets Tax Credits, grants and fundraising by the non-profit entity. This scenario requires a high-functioning organization with fund-raising capability.

A variation on this theme would be the Amazing Things Arts Center in Framingham, a non-profit that primarily operates a 180 seat performance venue. Such a use could be seen as complementing, or competing with, the nearby Bing Arts Center.

A for-profit performance space with food and beverage service could also work in the space, and would be a variation on the previous restaurant schemes.

Development Costs				
Site Purchase	(1)		271,300	
Construction				
	Site Work		40,000	
	Exterior Construction		80,000	
	Interior Construction			
	ADA, code		272,000	
	Performance space		367,000	
	Classroom space		<u>294,000</u>	
	Subtotal Construction		\$ 1,324,300	
	General Conditions		159,000	
	Contingency		<u>148,000</u>	
	Total Construction		\$ 1,631,300	
	FFE		\$ 250,000	
	Soft Costs		<u>\$ 490,000</u>	
	Total Project Costs		\$ 2,642,600	
Potential Funding Sources:				
	New Markets Tax Credits (2)		740,000	
	Fund Raising, grants, etc. (3)		1,900,000	
Notes:				
(1)	Assessed value as a "place-holder"			
(2)	Credits at 39% of total project costs, realized as project funding at 72% of face value.			
(3)	Total project cost minus NMTC, rounded			

6.4 Page Boulevard Reuse Scenarios

Evaluation of two scenarios that are potentially feasible according to the zoning and code analyses:

Page Boulevard Scenarios

- Contractor's shop, office above
- One or two-family live/work

General Notes, Page Boulevard Scenarios

- The site is isolated by traffic arteries, but has good visibility.
- It may be the easiest of the fire stations to tackle from a construction standpoint.

Oakland Street Features and Existing Conditions



Access is from Roosevelt Avenue only. The lot is large enough to accommodate parking for this relatively small structure.

The main garage door is no longer accessible from Page Boulevard



View from second floor looking towards the I 291 entry ramp.



The building is a simpler version of the Sumner Avenue station, designed by the same architect.



Standing in the garage with view of rear wall, stair to second level, and side garage door entry.



View towards former main garage entry.



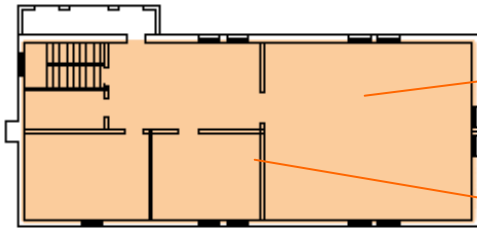
Common room at front of second level



There are some unexpected touches – such as this marble wainscot in the basement kitchen/dining area.

Re-use Scenario: Contractor's shop, office above

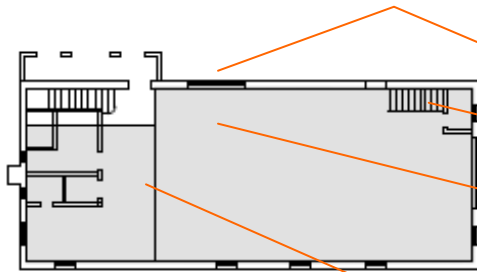
2nd Floor



The upper level contains approximately 1,450 s.f. of office space. The office area would probably require its own restroom(s). Existing plumbing is available.

Some of the existing partitioning may work well for an office layout.

1st Floor



Additional overhead door on side of building.

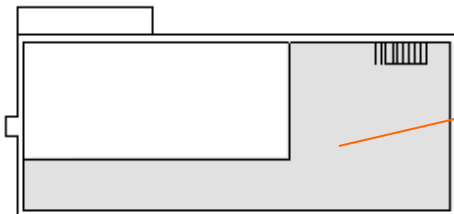
Stairs to the basement

Approximately 1,370 s.f. of area is available for use as a “contractor’s shop”, a term that covers many activities including workshop and showroom.

The space can easily be divided into areas with individual entries.

The concrete floor allows most white and blue collar activities.

Basement



The shaded area contains approximately 800 s.f. that was used for the firehouse kitchen and hose drying racks. It has usable headroom and window wells. The site is large enough to potentially allow the wells to be made deeper.

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Page Boulevard

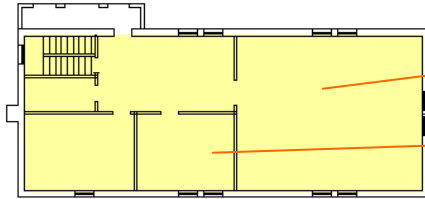
Project economics Contractor's shop, office above

This use fits well in the building and location. A contractor's office and workshop, or a cabinet maker's showroom could work in the ground level space. The office rent works out to just over \$1,200 per month, plus expenses. The lower level, which is basically unfinished, rents for less. In a likely scenario the building would be developed and owned by the lower level tenant, who could reduce the project cost with experience and sweat equity. The project budget is small for sale of historic credits to an investor partner and they are not modeled.

Development Costs				
Site Purchase (1)				\$ 111,300
Construction				
Site Work				5,000
Exterior Construction				26,000
Interior Construction				
ADA, code				23,000
Workshop/Showroom				41,000
Office				<u>98,000</u>
Subtotal Construction				\$ 193,000
General Conditions				\$ 23,000
Contingency				<u>\$ 22,000</u>
Total Construction				\$ 238,000
Soft Costs				<u>\$ 70,000</u>
Total Project Costs				\$ 419,300
Income/Expense				
Workshop/Showroom	1,370	\$ 8		10,960
Office	1,450	\$ 10		<u>14,500</u>
Rental Income				\$ 25,460
Vacancy				(1,273)
Expenses, workshop (nnn)				(1,370)
Expenses, office (nnn)				<u>(1,450)</u>
Net Operating Income				\$ 21,367
Potential Funding Sources:				
Commercial loan (2)				\$ 230,000
Owner's equity (3)	20%			\$ 61,600
Total funding available:				<u>\$ 291,600</u>
Preliminary estimate of funding gap: (4)				\$ 130,000
Notes:				
(1)	<i>Assessed value as a "place-holder"</i>			
(2)	<i>Based on debt service equivalent to 70% of NOI</i>			
(3)	<i>Assumes owner/developer funds 20% of hard and soft costs</i>			
(4)	<i>Total project cost minus available funding, rounded</i>			

Re-use Scenario: Single family Live-work

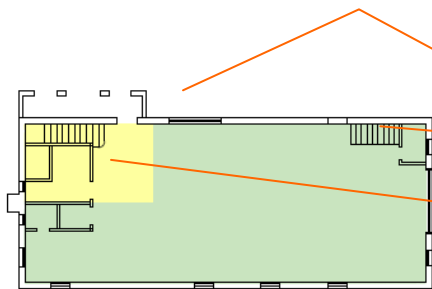
2nd Floor



The upper level contains approximately 1,450 s.f. living area.

Some of the existing partitioning may work well for living spaces

1st Floor



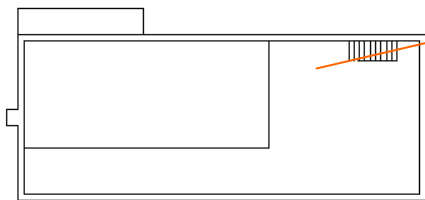
Additional overhead door on side of building.

Stairs to the basement

The entry is considered to be residential in this scheme. The work space area is approximately 1,300 s.f.

The garage space has high ceilings, white glazed tile walls, and light from three sides. The garage doors add great functionality for artists or craftspeople who work at a large scale.

Basement



The basement is available for ultimate development in this scheme, but is not needed initially.

- Retail Restaurant
- Office
- Studio
- Residential
- Performance
- Educational
- Industrial

Page Boulevard

Project economics Single family Live-work

This use fits well into the building and, more than an ordinary residence, it could be comfortable in its isolated location. Work space can use the ground level virtually as-is, and some of the upper level partitioning might be reusable. The inclusion of work space should reflect in the appraised value and borrowing amount. The construction costs could be reduced by sweat-equity, re-use of existing building features, and project management by an informed owner.

Development Costs					
Site Purchase (1)				\$	113,300
Construction					
	Site Work				5,000
	Exterior Construction				39,000
	Interior Construction				
	ADA, code				-
	Studio, 1st				36,000
	Living, 2nd				<u>65,000</u>
	Subtotal Construction			\$	145,000
	General Conditions			\$	17,000
	Contingency				<u>16,000</u>
Total Construction				\$	178,000
Soft Costs				\$	<u>45,000</u>
Total Project Costs				\$	336,300
Estimated lender valuation:		\$275,000			
Funding Sources:					
	Commercial loan (2)			\$	220,000
	Owner's equity (3)	20%		\$	<u>39,000</u>
Total funding available				\$	259,000
Preliminary estimate of funding gap (4)				\$	80,000
Notes:					
(1)	<i>Assessed value as a "place-holder"</i>				
(2)	<i>Based on 80% of estimated lender valuation.</i>				
(3)	<i>Assumes owner/developer funds 20% of hard and soft costs</i>				
(4)	<i>Total project cost minus available funding, rounded</i>				

7. Funding Strategies

There are, fortunately, many ways to fund the fire station renovations. The proformas on the preceding pages show several, among them bank debt, owner's equity, and historic tax credits. A list of the sources and strategies that can help these projects work financially is included below.

Site purchase price flexibility

The current assessed tax value is used as a place-holder for the purchase price in this report. The City of Springfield owns these fire stations and, subject to its legal procedures for divesting property, it can set the terms for their sale or lease. A low price or a nominal long-term lease might be justified in exchange for tangible public benefit. Typical public benefits include preservation of important historic buildings, neighborhood stabilization, and/or provision of valuable community services.

Compressed development teams

The fire station projects are small enough to be undertaken by single entities that combine the function of developer and contractor. Sometimes the developer/contractor retains ownership as well. Architects have also been known to undertake small projects acting as developer and construction manager. Groups of physicians sometimes develop their own office space. Overhead is reduced when fewer organizations are involved, resulting in lower amounts to be financed. Owner/developers can also utilize historic tax credits directly without bringing in partners, as discussed below.

Federal and State Historic Tax Credits

All of the sites in this report are potential candidates for historic tax credits. Two of the sites (Oak Street, and Oakland Street) are on the National Register of Historic Places, and could be developed as historic tax credit projects without uncertainty about eligibility. If developed in accordance with the Secretary of the Interior's Standards for historic rehabilitation they could receive both Federal and State historic tax credits.

The Sumner Avenue and Page Boulevard sites could probably be placed on the National Register, but only the commercial use of the Page Boulevard building would be eligible for historic credits. Neither Massachusetts nor Federal historic credits are available to owner-occupied residential projects.

Modifications made in 2008 to the federal tax code made tax-credit projects more attractive to builders and developers, letting them utilize the credits against their personal and business income over a period of years. Congress is considering a "small project" revision to the tax code that could raise the federal tax credit from 20% to 30% on projects with Qualified Rehabilitation Expenses of less than \$5 million. If enacted, the impact on small projects will be extremely beneficial.

Façade easements

Owners of a building can grant a preservation easement to a third party charitable organization. The easement lasts in perpetuity and restricts the owner's ability to change or alter the building's historic features. The resulting decrease in property value, which has typically been calculated at ten to fifteen percent of the value of a similar but un-restricted property, can be taken as an income tax deduction. This is a specialized program that should not be seen as a necessary component in a financial analysis.

Housing Subsidies

Low Income Housing Tax Credits (LIHTC's) are theoretically available to some of the multi-family residential options, but they are costly to document and administer and are not viable at this scale of development. Other forms of housing subsidy, such as the Section 8 program, are often used to make rental units affordable to tenants within a wide income range and can give a developer confidence that a base-line rent level can be achieved.

New Markets Tax Credits

New Markets Tax Credits were successfully used in the renovation of the Zumix firehouse in East Boston. They are only available to non-residential projects and are very expensive to document and administer. Where appropriate the analysis discusses the potential to use this type of credit.

Block Grant Funds

Certain aspects of development of the study sites might be supported directly or indirectly by the present or future rounds of block grant funding.

Massachusetts Development Finance Agency

Known as "MassDevelopment" this agency provides tax-exempt bond financing, real estate loans, and taxable bond financing. It focuses its development lending on compromised surplus government property (state, local, federal), contaminated brownfields sites, economically challenged communities, lending to educational institutions, green projects, etc. Examples of recent projects include 100 Cambridge Street in Boston, a contaminated state building redeveloped into a mixed-use project, 1550 Main Street in Springfield, a former federal office building repurposed for commercial rental, among others. The fire stations would be very small projects for this program, however.

The Massachusetts Cultural Facilities Fund

Since its inception the CFF has awarded over fifty million dollars in matching grants towards the construction and renovation of cultural facilities. This funding source was used at the Amazing Things Arts Center case study. Funds are awarded in a competitive process and can be spent on new projects or renovations of existing facilities. From initial application to delivery of funds takes at least one year, typically longer. This source cannot supply more than 50% of a project's costs, and typically provides a lesser percentage. Once in place the CFF funds are administered by MassDevelopment in a process similar to construction loan disbursements.

Massachusetts Preservation Projects Fund

The Massachusetts Historic Commission makes grants to non-profit organizations for specific historic construction projects in a competitive annual process. Recipient projects must be on the National and State historic registers. The MHC has funded many small projects including fire station renovations. Projects must demonstrate financial viability and benefits to both the cultural and tourism sectors.

Grants from private foundations and corporations

Some uses, particularly cultural facilities, can access grant funding from foundations and corporations. A list of such donors compiled by the Massachusetts Cultural Council is included in the appendix.

Clearly there is money available from myriad sources. None of it is easy to access. The evidence is clear, however, that developers, administrators, city officials, managers, non-profit boards of directors, and even private citizens are able to obtain subsidies if they are organized, at least somewhat capitalized, and strategic in their approach.

Patient Money

Not all people, businesses and institutions are constrained by “bottom lines” and appraised values. They may be taken with the beauty or historic importance of a particular building and find a way to acquire and renovate it, knowing that some of their expenditure of time or money may not be reflected in resale. They may be high net-worth individuals who can afford to self-finance and take a chance on ultimate appreciation in value, or private businesses that want the perfect headquarters. They may be non-profits that are able to raise funds to create the ideal home for their operations, aware that cost will exceed appraised value on the open market – but that is not too great a consideration if they can raise the money and intend to stay put.

Conclusions / Next Steps

With some gap-filling assistance, many of the development ideas posed in this study could move into reality. There is money available for both planning and capital expenditures. None of this funding is simple to access, but developers, consultants, city officials, managers, and motivated individuals can obtain loans, grants and subsidies if they are organized, at least somewhat capitalized, and strategic in their approach. The first step is always an objective assessment of project cost, income and expense – the type of groundwork laid out in the first seven chapters of this report.

Appendices

- A. MACRIS data sheets, Oakland Street Station
- B. MACRIS data sheets, Oak Street I.O. Station
- C. Reused Fire Stations in Springfield
- D. Funding Sources for Cultural Facilities
- E. Reused Historic Fire Stations in Massachusetts

Appendix A : MACRIS Inventory Form, Oakland Street Station
Massachusetts Cultural Resource Information System
 Scanned Record Cover Page

Inventory No: SPR.3857
Historic Name: Oakland Street Fire Station
Common Name: Springfield Chemical Engine - Hose Wagon B Station
Address: 173 Oakland St
City/Town: Springfield
Village/Neighborhood: Forest Park
Local No: 9210-132
Year Constructed:
Architect(s): Beston and Kelly; Carlson, David; Newton, W. A. Company; Seabury, Benjamin Hammett Co.; Wood, Lorin S.
Architectural Style(s): Romanesque Revival
Use(s): Fire House
Significance: Architecture; Community Planning; Politics Government
Area(s):
Designation(s):



Area(s)	Form No.
	SPR.3857

National Register of Historic Places Criteria Statement Form

Check all that apply:

- Individually eligible Eligible only in an historic district
 Contributing to a potential historic district Potential historic district

Criteria: A B C D

Criteria Considerations: A B C D E F G

Statement of Significance by Bonnie Pason
The criteria that are checked in the above sections must be justified here.

The Oakland Street fire station is eligible for the National Register as the first fire station constructed for Forest Park and the only one of the first three constructed still to be in use as a fire station, having served this densely populated section of the suburb for over one hundred years.

The building is a fanciful version of the Romanesque Revival style occupying its corner site with a definable presence. It is an excellent example of the work of Springfield architect Benjamin Hammett Seabury who was responsible for both its original design and for a later compatible addition. Few subsequent alterations have been undertaken, leaving the building in a well-preserved state.

FORM B - BUILDING

Assessor's number

9210-132

USGS Quad

Springfield

Area(s)

Form Number

SPR.3857

Massachusetts Historical Commission
 State Archives Building
 220 Morrissey Boulevard
 Boston, Massachusetts 02125

Town Springfield

Place (neighborhood or village) _____

Forest Park

173 Oakland Street

Name Oakland Street Fire Station

Present fire station

Original fire station

Construction 1894-95

Foreman, 1980

Style Romanesque revival

Builder B.H. Seabury

Material:

Foundation brick

Wall/Trim brick

Roof not visible

Outbuildings/Secondary Structures _____

Major Alteration (with dates) Additions: expansion,

1907; hose tower, 1967

Condition good

Moved No Yes Date _____

Acreage less than once acre

Setting The building, set at an angle to the junction

of Oakland and Dickinson Streets, occupies a corner

lot on a crowded commercial intersection



Sketch Map

Draw a map of the area indicating properties within it. Number each property for which individual inventory forms have been completed. Label streets including route numbers, if any. Attach a separate sheet if space is not sufficient here. Indicate North.

See attached

RECEIVED

SEP 30 1999

MASS. HIST. COMM

Recorded by Marla Miller/Bonnie Parsons

Organization Pioneer Valley Planning Commission

Date (month/year) Sept 1999

BUILDING FORM

ARCHITECTURAL DESCRIPTION see continuation sheet

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The façade of this rectilinear brick fire station consists of two bays capped with a granite lintel stretching across the building's the full width. It is eight bays deep on its northern elevation and five on its southern elevation; between the second and third bays on the southern elevation the building projects the width of a narrow bay, lit on both stories with narrow round-arched windows. A 1969 hose tower stands on the south elevation near the southeast corner of the building. The second story façade contains tripartite arrangements of rectangular windows set in round wall arches, each having granite keystones set in brick voussoirs. The structure is topped with parapets having architect Benjamin Seabury's standard curvilinear castellations.

HISTORICAL NARRATIVE see continuation sheet

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Observance of the Springfield Fire Department's Centennial anniversary in 1894 triggered an interest and pride in the department, demonstrated in a notable number of new construction projects: eight were constructed by the end of the decade. The Oakland Street Station, built in 1894-95 by Beston & Kelly from plans drawn by architect Benjamin Hammett Seabury, was the first fire station to be built south of the Mill River. Other stations erected that year include one on the corner of Pine and Cedar Streets (157 Pine Street, today the Mental Health Association of Springfield) and another on Mill Street (today the Tavern Inn, at 25 Mill Street), both also designed by Seabury. The Oakland Street Station, served by the Combination Chemical Engine and Hose Wagon B, was centrally located to provide security for this rapidly growing section of the city.

The influence of architect B. H. Seabury (1856-1945) on Springfield's architectural character is particularly evident in the city's extant schools and fire stations. Born in Rhode Island, Seabury graduated from MIT in 1879. In 1883, he entered into partnership with F.R. Richmond (1851-1907), and in the 1880s and 90s, the two men and/or their firm was a prolific source of Springfield's municipal and commercial building designs. The firm dissolved in 1890, after which both architects continued to work independently in Springfield. Of the seventy public buildings designed by either or both Richmond and Seabury (including the Kensington Street School at 31 Kensington Street and the Forest Park School at 46 Oakland Street), ten were fire stations (other stations by Seabury include the 1903 Armory Street Station (440 Armory Street), the 1910 Margaret Street Station (today Mt. Carmel Convent at 56 Margaret Street), the 1911 Fire Headquarters (not extant), and the 1915 Winchester Square Station (3 Eastern Avenue; as of this writing, funding is being sought to renovate the building into office space).^{*} Generally, these buildings were deep, two-story structures, usually rectilinear in plan, though occasionally square bays were added. Ground floors always contained an apparatus room, with stalls and stables as well as hay and feed storage areas occupying the end opposite the street entrance. Upper floors contained dormitories for firemen. Towers provided space in which hoses dried after use.

In 1907-08, additions were made to the Oakland Street Station, again with plans by Seabury. Essentially a mirror image of the original building, the addition accommodated a ladder truck, "it being the opinion that one will be needed in this section within a very short time" (Municipal Register, 1907, p. 196). In 1917, builder L.S.

^{*} Firefighter Fred Rodriquez suggests other similar stations that may also have been Seabury designs, a point which may warrant further research. These include the East Springfield stations at 1043 Summer Avenue and 833 Page Boulevard, and the Springfield stations on Bond Street (not extant), Dwight Street (not extant) and 148 Taylor Street, today the Cummins Memorial Mission.

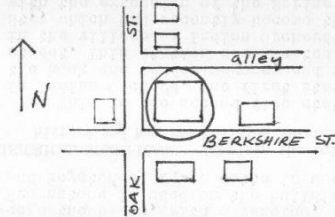
Appendix B : MACRIS Inventory Form, Oak Street Station

Massachusetts Cultural Resource Information System
Scanned Record Cover Page

Inventory No: SPR.3270
 Historic Name: Indian Orchard Fire Station
 Common Name:
 Address: 97 Oak St
 City/Town: Springfield
 Village/Neighborhood: Indian Orchard
 Local No:
 Year Constructed:
 Architect(s): Gardner, Pyne and Gardner; Seabury, Benjamin Hammett Co.
 Architectural Style(s): Colonial Revival
 Use(s): Fire House; Warehouse
 Significance: Architecture; Community Planning; Politics Government
 Area(s):
 Designation(s):



property and nearest intersection. Indicate north.



Recorded by Ed Lonergan
 Organization Spfld. Pres. Trust
 Date June 1984

AREA	FORM NO.
	3270

*P1. INDIAN
 US65-SPRING, N
 SECT A*

Town Springfield

Address 97 Oak St.

Historic Name Indian Orchard Fire Station

Use: Present storage

Original fire station

DESCRIPTION:

Date 1897; 1906

Source Mun. Report; Republican

Style _____

Architect _____

Exterior wall fabric brick

Outbuildings _____

Major alterations (with dates) --

Moved --- Date _____

Approx. acreage _____

Setting _____

ARCHITECTURAL SIGNIFICANCE (Describe important architectural features and evaluate in terms of other buildings within the community.)

This is a fine example of turn-of-the-century public architecture in Indian Orchard. The building is two stories in height, of brick construction, with a five-story tower in the rear. The facade has two, wide bays on the first floor, and four pairs of windows, separated by pilasters on the second floor. A cornice caps the block, with a paneled, parapet wall of brick above. Brownstone is used on the building for window sills, lintels, and keystones. Terra cotta is used for the capitals on the pilasters, and for moldings.

HISTORICAL SIGNIFICANCE (Explain the role owners played in local or state history and how the building relates to the development of the community.)

This is the second fire station built by the City of Springfield in Indian Orchard. The first station was too small to handle the hook and ladder wagons, and was located on a narrower, side street. This station was located on the major north-south street in the village of Indian Orchard, at the intersection of Berkshire St., which had recently become the major entrance to the village with the extension of the Springfield Street Railway Co.'s trolley line to Indian Orchard. The trolley tracks extended out State St. from the center of Springfield to Pine Point, and then passed along Berkshire Ave. to Berkshire St. From this intersection the line turned north on Oak St. to Main St., and then easterly to the Ludlow bridge.

Originally, this station was only one bay wide. The northern bay was added in 1906, so that both Engine Co. No. 5 and Hook and Ladder Co. No. 5 could be housed here. This fire station served the village of Indian Orchard until the late 1960's when a new station was built on Odessa St., near the southern boundary of the neighborhood.

The original part of the station was designed by Springfield's most prominent architectural firm of the turn-of-the-century period, Gardner, Pyne & Gardner, while the addition (which closely matches the

BIBLIOGRAPHY and/or REFERENCES (name of publication, author, date and publisher)

original) was designed by Springfield architect B. H. Seabury

Springfield Atlases: 1882, 1899, 1910, 1920, c1929




Municipal Report of the City of Springfield: 1898, 1899, 1907, 1908

Spfld. Daily Republican Dec. 31, 1897; Dec. 31, 1906

330 WASHINGTON STREET, SPRINGFIELD, MASSACHUSETTS
 HISTORICAL COMMISSION

FORM 2 - 1/1972

Appendix C: Reused Fire Stations in Springfield

<p>25 Mill Street, Springfield, MA <i>New England Cremation Center</i></p> <p>Building size: 8,012 s.f. Lot area: 11,286 s.f. Date of transfer: 1998 Present use: funeral home with cremation facility</p>	
<p>2808 Main Street, Springfield, MA <i>Pioneer Valley Transit Authority</i></p> <p>Building size: 13,769 s.f. Lot area: 12,281 s.f. Date of transfer: 1988 Present use: head office of regional transit authority</p>	
<p>56 Margaret Street, Springfield, MA <i>Italian Cultural Center of Western Massachusetts</i></p> <p>Building size: 5,582 s.f. Lot area: 6,606 s.f. Date of transfer: most recent sale was in 2008, previously used as a primary school for several decades. Present use: meeting and classroom space</p>	

1189 -1191 Worcester Street , (IO)
Springfield, Ma

Building size: 2,552 s.f.
Lot area: 5,940 s.f.
Date of transfer: 1984
Present use: Two family residence



148 Taylor Street, Springfield, MA
Springfield Rescue Mission

Building size: 10,164 s.f.
Lot area: 10.898 s.f.
Date of transfer: 1997
Present use: emergency shelter and
boarding/rooming house



157 Pine Street, Springfield, MA
Association Properties, Inc.

Building size: 14,103 s.f.
Lot area: 14,092 s.f.
Date of transfer: 1991
Present use: housing for
handicapped adults



Appendix D: Funding Sources for Cultural Facilities

FUNDING SOURCES for Cultural Facilities

*Sources of additional funding currently used by recent
Cultural Facilities Fund recipients*

Foundations	Corporations	Historical
Albert R. Rice Foundation	American Express	1772 Foundation
Amelia Peabody Trust	Bank of America	National Park Service
Barr Foundation	Cape Cod Five Cents Savings Bank	National Trust for Historic Preservation
Blossom Fund	EMC	Save Americas Treasures
Brookline Community Grant	Fallon Healthplan	MassHistoric
Edward Bangs and Eliza Kelley Foundation	Fidelity Foundation	
Edward G. Johnson Fund	Framingham Cooperative Bank	
Fletcher Foundation	Hanover Insurance Group	
Foundation for Metrowest	Keyspan	
George Alden Trust	Liberty Mutual	
Goerge F and Sybil H. Fuller Foundation	Mass Mutual	
Golden Family Foundation	National Grid	
Harrington Foundation	Polar Beverage	
Herman and Frieda Miller Foundation	Soverign Bank	
Highland Street Foundation		
Houston Family Foundation		
Janes Trust		
Kresge Foundation		
Lynch Foundation		
McNevin Family Foundation		
Mildred H McEvoy Foundation		
Millipore Foundation		
Pettinos Fund		
Richard H. Driehaus Foundation		
Rousseau Charitable Trust		
Stoddard Charitable Fund		
Sudbury Foundation		
Thorne Foundation		

prepared by Massachusetts Cultural Council, 2011

Combined Funding Source

ArtPlace America is a collaboration among 14 foundations, 8 federal agencies, and 6 financial institutions dedicated to strengthening the field of creative placemaking.

Appendix E: Re-used Historic Fire Stations in Massachusetts

Source: Wikipedia

Congress Street Fire Station, now known as the Boston Fire Museum, is an historic fire station at 344 Congress Street in Boston, Massachusetts.

The Romanesque style station was designed by Harrison H. Atwood and constructed 1891. The building was added to the National Register of Historic Places in 1987.



The Beacon Street Firehouse is a historic fire station at 108 Beacon Street in Worcester, Massachusetts. It was designed by Worcester architect George H. Clemence, and built 1901-2 for \$25,600 by local French-Canadian builder Eli Belisle. It is a two story rectangular building with three truck bays, and an entrance door on the right. The truck bays are topped by shallow arches of alternating brick and limestone sections. The second floor windows are arched in pairs by round arches of similar styling.

The building was added to the National Register of Historic Places in 1980,[1] at which time it served as a warehouse.



Engine House No. 34 is a historic fire station at 444 Western Avenue in Boston, Massachusetts.

The engine house was designed in 1887 by Charles Bateman and was added to the National Register of Historic Places in 1985.



This fire station was built in 1893 and added to the National Register of Historic Places in 1982. It was an active fire station until 1976. It has since been made into a museum for the local fire dept as well as the town history in general, and has many artifacts of local interest. The first curator was the late George Cunningham, who was active there until his late 90s.



The Globe Village Fire House is a historic former fire house on West Street at Main Street in Southbridge, Massachusetts. It is the first of two fire stations built in the 1890s; the other, the Elm Street Fire House, is still in use as a fire station. It is a relatively modest Colonial Revival brick structure, although it shares some Greek Revival features with other nearby brick structures. Its corner tower originally had a mansard-style roof.[2]

The building was listed on the National Register of Historic Places in 1989.[1] At the time of its listing it had been repurposed for use by a veterans group



Elm Street Fire Station is an historic fire station at 58 Elm Street in Gardner, Massachusetts.

The station was built in 1897 and added to the National Historic Register in 1980.



The Beacon Street Firehouse is a historic fire station at 108 Beacon Street in Worcester, Massachusetts. It was designed by Worcester architect George H. Clemence, and built 1901-2 for \$25,600 by local French-Canadian builder Eli Belisle. It is a two story rectangular building with three truck bays, and an entrance door on the right. The truck bays are topped by shallow arches of alternating brick and limestone sections. The second floor windows are arched in pairs by round arches of similar styling.

The building was added to the National Register of Historic Places in 1980,[1] at which time it served as a warehouse.



Kilmer Street Fire Station is a historic former fire station located at the corner of Oak and Kilmer Streets in Taunton, Massachusetts. It was built in 1915 to replace a previous station on Olney Street, and is the youngest of the city's five historic fire stations.

The two story single bay structure features a pyramidal hipped roof and matching hose tower. The original bay door has been replaced to allow for larger vehicles. It was added to the National Register of Historic Places in 1984. The building is currently used by the city for storage.



Lake Street Fire Station is an historic fire station at 2 Lake Street in Gardner, Massachusetts.

It was built in 1884 and added to the National Historic Register in 1980.



Massasoit Fire House No. 5 is a historic former fire station located at 83 Freedom Street in Fall River, Massachusetts.

The building was designed by Boston architects Hartwell & Swasey and was built in 1873. This same firm also designed several other extant fire stations in Fall River during this period, including the Quequechan No. 1, Anawan No. 6 and Pocasset Firehouse No. 7. The building was originally designed to also contain a police station.

It was added to the National Register of Historic Places in 1983. It now contains residential apartments.



The New Bedford Fire Museum is located in the former Fire Station No. 4 at the corner of Sixth and Bedford streets in that city in the U.S. state of Massachusetts. The red brick building, opened in 1867, was one of the oldest continuously operating fire stations in the state when it was closed in 1979. In 1975 it was added to the National Register of Historic Places as Fire Station No. 44. The museum was opened the following year.

The museum has a collection of old firefighting equipment and some old fire engines. Visitors can try on old uniforms and slide down the pole. Old city fire records dating to 1890 are available for research and review.[4] Retired and active city firefighters act as docents. Rain damage to the station's roof[3] recently required the closing and renovation of the museum's second story. It reopened in July 2008.



Old Central Fire Station is a historic fire station at 66 Allen Street in Pittsfield, Massachusetts. It is located roughly behind the Old Town Hall in Pittsfield's Park Square Historic District.

The station was built in 1895 to a design by E.J. Cowell, the city's building inspector. The building is constructed primarily of brick in a Richardsonian Romanesque style. It has four bays, and was the first city station capable of housing horses on its premises. The building was used as a fire station until 1976, and thereafter as a city vehicle storage facility. The station was listed on the National Register of Historic Places in 1977, and was included in an expansion of Pittsfield's Park Square Historic District in 1991.



The Old Hose House is a historic fire house at 1249 Main Street in Reading, Massachusetts. The Colonial Revival wood frame building was constructed in 1902 for a cost of \$1,180.50, plus \$10 for the land on which it stands. The modestly-scaled building housed a fire truck until 1930, after which time it has served as home to community groups.

The building was listed on the National Register of Historic Places in 1984.



Park Street Firehouse is a historic fire station at 47 Park Street in Adams, Massachusetts. It was built in about 1890, during the boom of Adams' industrial facilities, to house an engine company of the Adams Fire Department on the ground floor and apartments above. The building now houses the headquarters of an ambulance company. The station was listed on the National Register of Historic Places in 1982.



The Pleasant Street Firehouse is a historic firehouse at 408 Pleasant Street in Worcester, Massachusetts. It is a two story brick building, with a hip roof topped by a cupola, and a pedimented gable with oriel window atop the center section of the main facade.

The building was listed on the National Register of Historic Places in 1980,[1] at which time it was Worcester's oldest active firehouse.[It is no longer used as a firehouse.



Harvard Avenue Fire Station is a historic site on 16 Harvard Avenue in Boston, Massachusetts.

The station was designed in 1891 by Harrison H. Atwood, who also designed the Congress Street Fire Station, and was added to the National Register of Historic Places in 1983.



Pocasset Firehouse No. 7 is a historic former fire station at located 1058 Pleasant Street in Fall River, Massachusetts. Built in 1873, it is one of four extant firehouses within the city designed by Boston architects Hartwell & Swasey in the Ruskinian Gothic style. The others include the Quequechan No. 1 on Prospect Street, the Massasoit No. 5 on Freedom Street, the Anawan No. 6 Firehouse on North Main Street.

In 1895, an extension was built on the west side of the main structure to accommodate of a hook and ladder truck. A portion of the building was used as a police station. The Pocasset Firehouse was built to serve the Flint Village section of the city. It operated as a fire station until 1988, when the Flint Renny/Eastwood Fire Station opened on Eastern Avenue.

The station was added to the National Register of Historic Places in 1983. It now privately owned, and occupied by Baker Sign Works



Quinsigamond Firehouse is a historic fire station at 826 Blackstone River Road in Worcester, Massachusetts.

The Romanesque style building was constructed in 1891 by Patston & Lincoln and added to the National Register of Historic Places in 1980.



The Woodland Street Firehouse is an historic fire station at 36 Woodland Street in Worcester, Massachusetts. It is one of the finest of Worcester Victorian-era firehouses. The two story brick building was built in 1886 in a Queen Anne style, with some Romanesque details. It is nearly identical to Worcester's Cambridge Street Firehouse; both were designed by Fuller & Delano and built the same year.

The building was listed on the National Register of Historic Places in 1980. It is no longer used as a firehouse.



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