Redeveloping Lawrence, Massachusetts' Historic Mill District Insights into Adaptive Reuse in Untested Residential Markets

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Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development

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Abstract:

Lawrence, Massachusetts is one of a number of post-industrial cities in the northeastern United States that has the potential to convert underutilized industrial buildings into a valuable community asset, namely housing. Yet, despite a plentiful supply of historical industrial buildings, the increasing popularity of residential mill conversions, and a strong housing market in eastern Massachusetts, no mill has been converted for the purpose of housing in Lawrence in the last decade. This thesis argues that if mill owners take action and partner with developers to undertake redevelopment, and partner with community development organizations and the local government, key barriers to development in Lawrence could be dismantled in order to prepare the mill district for redevelopment.

Targeted primarily at mill owners and community development organizations in Lawrence and similar cities, this thesis identifies key barriers to residential redevelopment that exist in untested residential conversion markets like Lawrence. It then provides recommended solutions to overcome those barriers, learned from other conversion projects within a 50 mile radius of Boston. In doing so, this thesis demystifies the development process to help mill owners and community development organizations acquire a more realistic vision for the redevelopment of the mill district. In the process, it also gives mill owners a better understanding of their options in terms of whether to sell or partner with a developer and describes how community development organizations may contribute to the mill district's redevelopment.

From this research, two main conclusions are drawn. First, development in the mill district must be approached with cautious optimism – the prospect for success is high due to current market conditions and grassroots efforts, yet so is the risk. Professional developers will likely need to be involved in redevelopment, either on their own or as partners with mill owners. This is because the risk of residential redevelopment in the mill district is high in comparison to similar projects in other cities, and the margin between achievable prices and costs is tight. An experienced developer with significant financial resources and a proven track record needs to participate to increase the probability of success, and to magnify the benefits of redevelopment for mill owners, the community, and future residents of the mill district.

The second and final conclusion is that mill owners, developers, local government, and community development organizations need to continue the precedent for collaboration set forth by participatory planning efforts like the Reviviendo Gateway Initiative, a community development coalition. In doing so, Lawrence's mill district will distinguish itself from mill conversions in other cities. Collaboration should be directed to marketing to *cultural creatives*, a marketing term that includes people who may be interested in such areas as the arts, cohousing, green building, and social activism. Marketing to these groups will generate demand for housing in the mill district, and ensure that the mills become home to residents who will become socially and financially invested in the city. Collaborative efforts should also continue to follow the path established by other Lawrence efforts, which is one of resident involvement. By involving residents in the planning process, as well as by helping current residents purchase or rent in the mill district, current Lawrence residents will be prepared to enjoy the success of the mill district's redevelopment. In the long term, this approach could create a major turnaround in Lawrence and build an initiative that helps the city emerge again as a regional cultural center.

Thesis Advisor: Lorlene Hoyt

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Acknowledgements

I first visited Lawrence when I interned for Groundwork Lawrence in spring 2004. Over the course of the semester, I researched how Lawrence could restore its canals, but I also became familiar with a sense of community that I have witnessed no where else. The people whom I met over the course of the semester and during my research have been a true inspiration for this thesis and to me personally. Their level of cooperation, creativity, and vision for Lawrence's future redefines the word community.

I would like to thank everyone who contributed to this thesis. I interviewed over 30 people for this report and all gave me valuable ideas. In particular, I would like to thank Maggie Super from Groundwork Lawrence for first inviting me to Lawrence and serving as my reader for this report. Her work and dedication to improving the city is an inspiration. I would also like to thank Chet and Gary Sidell for providing me insight into the perspective of the mill owner and allowing me to observe them as they make plans for the future of their mills. The Sidells have a visionary perspective for the future of Lawrence, which I look forward to seeing implemented. Finally, I would like to thank Lorlene Hoyt, my advisor. She spent countless hours with me and taught me how to share my voice through this report.

Hopefully this project will in some way contribute to the realization of the vision for Lawrence's future that is in the minds and hearts of its people.

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Preface – A Note to Readers

Audience and Goals

This thesis is written for two main audiences: 1) mill owners and 2) organizations, such as community development organizations and the local government, who want to support the redevelopment of Lawrence, Massachusetts' historic mill district, and others like it in the Northeast.

Many parties are already working exceptionally hard in Lawrence to spur redevelopment and ensure that when it happens, redevelopment benefits mill owners, community members, and future residents. This report offers some key strategies that can be implemented to support the process and to ensure that it has the maximum benefit for the greatest number of people.

Specific points that should be taken from the report include the following.

<u>Mill Owners</u>: Mill owners are integral to the redevelopment process. No matter what else happens in Lawrence, unless they act (by selling, developing, or partnering with a developer), the mill district will remained unchanged. As owners, they hold the primary responsibility for buildings in the district. This thesis can be used as a tool for mill owners to:

- 1. Enhance their understanding of the development process.
- 2. Become aware of the various options available including holding, selling, partnering with developers, or trying to develop their mills alone.
- 3. Attain a clearer understanding of the risks and benefits associated with each option, in order to determine their role in the development process and implementation.

<u>Community Development Organizations and the Local Government</u>: Organizations that can support the redevelopment process are also integral to its success. Acknowledging all that local organizations have already done in the mill district, the following key efforts should be emphasized and/or continued. These endeavors can increase the likelihood of redevelopment by reducing costs and risks for owners and developers. They can also help ensure that current residents benefit from redevelopment.

- 1. "Market" the mill district to the region and to potential residents.
- 2. Reduce red tape associated with redevelopment.
- 3. Support incentives and efforts that increase the likelihood that target populations will move to the mill district.
- 4. Seek funding for collective improvements for the mill district that could facilitate development, such as public structured parking, canal and riverfront improvements, and public art.
- 5. Involve current residents in planning and individual building design to ensure that they will benefit from redevelopment and to solve the design challenges associated with housing diverse populations under one roof.

Emphasis on Housing

Housing is the focus of this report, not because all mills should be converted to housing, but because housing is presently an opportunity. Today, the eastern Massachusetts housing

market is hot and the demand for lower priced market rate housing, especially loft style units in converted mills, is strong.

Housing is also the main focus of this report, because it has the potential to create many community benefits. First, housing in the mill district can begin to address the housing affordability issues in Lawrence that are challenging local residents. Second, housing has the potential to stimulate the local urban economy by attracting creative residents, like artists, cohousers, and green consumers. These residents tend to generate life in an area, are active in the local community, and draw visitors. Increased local purchasing power is also a key part of the equation. More residents will bring more disposable income to the area. This will in turn support small businesses in the mill district, which can help to attract new companies to the mills and create more jobs for local residents.

Methods

In order to reach these conclusions, more than 30 professionals were interviewed. Professionals included mill owners, representatives from Lawrence's nonprofit organizations, real estate brokers, property managers, developers, architects, engineers, a lawyer, and tax credit consultants and syndicators. To better understand the cohousing population, 15 households interested in living in a cohousing project in the mill district were also surveyed. Literature on the regional housing market and emerging housing markets in other third tier cities¹ was reviewed. Four projects in three third tier cities (Lowell, Lynn and Pawtucket, Rhode Island) with new residential mill conversion projects were also visited. Lessons learned from these four projects are featured throughout this report.

Organization

Out of respect for the reader's time, Chapters II through VI begin with their conclusions. These summary pages discuss each chapter's most important conclusions. Readers are then encouraged to explore the chapters that interest them most.

To determine how to promote the redevelopment of the mill district, this report first considers Lawrence as a city and its readiness for redevelopment in Chapter II. Next, in Chapter III, the barriers to development in Lawrence are identified. Ways to overcome these barriers and solutions from other cities are discussed throughout the rest of the report. In Chapter IV, this report takes a closer look at Lawrence's current housing market, which up until now has been the largest barrier to redevelopment. In Chapter V, the market for housing in the mill district is discussed and projections of condo prices and rents are made. In Chapter VI, the market is narrowed further to four main types of housing that could be built in the mill district.

Then in Chapters VII, the report sheds light on the development process itself. Equipped with a better understanding of how mills are redeveloped in similar communities, as well as how they could be redeveloped in Lawrence, mill owners will be better prepared to decide their role in the development. Here, mill owners will be asked to consider the risks associated with different

¹"Mt. Auburn Associates defines third tier city as a city with a population between 15,000 and 110,000, playing an important role in its regional economy and experiencing a population change since 1950 that ranges from severe decline to only moderate growth. In the United States, 396 cities meet this definition." National Center for Small Communities Website, http://www.natat.org/ncsc/pubs/newsletter/Oct2001/Article2.html, 2004

development approaches, as well as the risks associated with selling or partnering with a developer.

Specific issues discussed in each of the chapters can be understood in more depth in the following appendixes: Reviviendo Gateway Initiative, Mill Conversion Case Study Summaries, Market Analysis, Housing Product Design Requirements, Cohousing, Green Building, Funding Options, and Parking Options.

With this information in hand, mill owners, community members, local governments, and community development organizations will be better equipped to aid in the redevelopment of the mill district. As will be demonstrated in this report, redevelopment efforts will be most successful if all parties understand the process and can work together to create a collaborative action.

Chapter I. The Vision for the Mill District: An Introduction

Standing on the sidewalk in the center of the Duck Bridge in Lawrence is like being in the center of a waiting treasure. Below is the Merrimack River, one of the rivers that helped power the industrial revolution. Rising from either side of the river are majestic brick mill buildings, enormous in size.



View of the mill district from the Duck Bridge.

Their substance and strength alone enables a person to see back to an era when the mills were full of activity and production. An era when Lawrence, founded in 1847, emerged as the first planned city in America. Between 1890 and 1915, Lawrence's population doubled from 44,000 residents to 90,000 residents. By the 1920s, the population had grown to 94,000, with 1/3 of residents working in the mills. However, as industry declined, so did the population. By 1950, the population dropped to 67,000. Today Lawrence has 72,000 residents.²



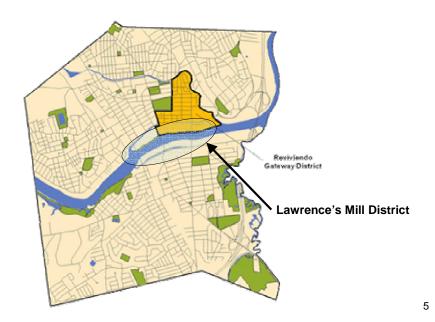
View of the Ayer Mill and clock tower.

Today, the 10,324,000 square feet of mills³ in the Lawrence mill district⁴ seem to be waiting. The buildings hug the river and both sides of the North and South Canals from

² Butler, <u>Britta. ReWorking the City of Workers: A New Housing Paradigm for the Immigrant City</u>. MIT Master's Thesis, 2003.

³ VHB/Vanasse Hangen Brustlin, Inc., Rojas Associates, Inc., RKG Associates, Inc., American Trucking Association Foundation, Tremont Preservation Services. Merrimack Corridor Enhancement Project, Final Report. Submitted to City of Lawrence Office of Economic Development, February 4, 1998.

north of Canal Street to the commuter train tracks toward the south. The mills also make a path up Union Street and run to Route 495 to the east and past Broadway to the west.



The mills create a solid massive core in the center of the city that embodies the past, yet also the future. The mills are a community treasure, yet 30% vacant and underutilized, used mainly for storage.

If all the daydreams of residents and visitors who have considered what the future of the mills could be were captured on a single page or in a single image, one of the most fascinating places in eastern Massachusetts would emerge. That image may look something like the mission statement of the Reviviendo Gateway Initiative, a community-based initiative made up of diverse stakeholders from Lawrence, working to improve the mill district, North Common neighborhood, and the downtown. ⁶

We, the Reviviendo Gateway Steering Committee, envision the Gateway district as the historic heart of an international city- a place that is vibrant, dynamic, diverse and proud. We envision clean streets and beautiful parks, safe neighborhoods, and a thriving business district with new job opportunities. We envision a local economy built on creativity and entrepreneurship, from software

9

⁴ Lawrence has two sets of mill complexes, one in the center of Lawrence, which I will call the 'mill district' and the other in the northwest quadrant, known as the Malden Mills complex. For purposes of this report, the mill district includes both the North Canal Mill District and the South Canal Mill District and runs from north of Canal Street to the commuter train tracks toward the south, up Union Street, and to Route 495 to the east and past Broadway to the west. The North Canal Mill District is listed on the National Historic Register. Because of the community planning efforts already taking place in the mill district, this study focuses on it exclusively. However, many of the concepts discussed could also apply to the Malden Mills Complex.

⁵ Overlay on top of map from Lawrence Community Works and MIT Department of Urban Studies and Planning. Reviviendo Gateway Initiative website, www.avencia.com/lcw, 2004.

⁶ This organization's goals are included in the Reviviendo Gateway Initiative Appendix.

engineers to metal smiths. We support the development of arts and cultural facilities that highlight our unique talents. We support a sustainable mix of uses, with housing, shops, restaurants, recreation, and offices within walking distance of each other. As we look to the future, we also recognize the need for measured progress that balances new development with affordability. We are committed to making the North Common neighborhood, mill district and downtown a place of opportunity, through investments in high-quality housing, jobs, and education.



View of the Duck Mill, Pemberton Mill and Washington Mill seen from the North Canal.

Until recently, market conditions and other barriers to redevelopment have limited the profitability of residential mill conversions. For example, Museum Square (completed in 1989), is the only residential mill conversion project in Lawrence. However, as will be discussed in this report, the redevelopment of the mill district is possible in today's housing market if certain barriers to development are overcome.



The 176 Unit Museum Square is the only mill in Lawrence that has been converted into housing.

Already, a number of mills have been converted into office space including 60 Island Street, the Everett Mill, and the 181 Canal Street. Another building in the district has been recently renovated into 1 Mill Street, a successful restaurant with canal-side seating.



Sixty Island Street has already been converted into office space.

Other mill owners, such as the Sidells, are seriously considering converting one of their mills, the Duck Mill, into housing. Still another owner, Bob Ansin, speaks of his 'brownfield to brightfield' approach to redevelopment and his interest in converting the Wood Mill into a thriving mixed used community and green building with housing, offices, a school, and entertainment facilities.

However, to make these dreams a reality, mill owners, community development organizations, the local government, and residents alike, must overcome the many barriers to development that exist and further distinguish Lawrence's mill district from other communities with conversion projects. Already precedents for collaboration have been set in Lawrence, seen in community efforts like the Reviviendo Gateway Initiative and others, which will be discussed in subsequent chapters. The potential is recognizable and the collaborative framework already exists. This report should be one more tool that the community can use to support the redevelopment process.



The Sidells, the owners of the Duck Mill, are considering converting the 120,000 square foot mill into housing.

Chapter II. Lawrence Context – Statistics Versus Reality

Key Concepts and Conclusions

Despite statistics that reveal that Lawrence is one of the four "most significantly stressed" cities in Massachusetts, grassroots activity indicates a comeback. If a comeback does exist, mill owners, investors, developers and future residents will be more eager to invest in the redevelopment of the mill district.

Grogan and Proscio, the authors of <u>Comeback Cities</u>, identify key indicators of a community comeback. Three of these indicators are met in Lawrence, as shown by the following examples.

Indicator 1 – 'Maturing of grassroots revitalization efforts.' Community development organizations are partnering with mill owners, business leaders, local government, and residents to educate the public, prepare them for homeownership, and involve them in planning; to build new housing and other community assets; to plan for the restoration of the mill district and other neighborhoods; to support the arts; and to support redevelopment through zoning changes.

Indicator 2 – 'Thriving small businesses.' Small businesses are growing in Lawrence with more businesses opening and succeeding in Lawrence's historic commercial district and in converted mill buildings in the mill district.

Indicator 3 – 'The unshackling of inner city life from giant bureaucracies.' Coalitions like the Reviviendo Gateway Initiative (RGI) and the NeighborCircle campaign, both made up of residents, building owners, leaders, and business people, are growing in Lawrence. Groups like these are taking ownership for the future of various areas of the city, and making change through seeking funding for improvements; running planning events that involve the public; organizing neighborhood improvement and cleanup campaigns; building parks and housing; and giving residents a voice and a role in change.

Together these indicators support the notion that Lawrence is in the midst of a comeback and based on community conditions alone, would make its mill district a reasonable location for redevelopment. Combined with physical improvements currently underway, including the construction of a new commuter train station and the Gateway Initiative, these indicators imply that redevelopment in Lawrence's mill district is likely to succeed.

Lawrence – The Statistics

Located 25 miles north of Boston, the city of Lawrence grew quickly as workers came to its mills. As previously stated, 1/3 of Lawrence's population worked in the mills by 1920, however, by the 1940s, much of the textile industry had left the area, and population left with it. Unemployment progressively increased over time as more jobs left the area. Lawrence's thriving Essex Street, the main commercial district of the city, also began to deteriorate as the purchasing power within the city decreased, and like most cities in America, shoppers went to malls and big box stores. Already strained by a contracting industrial market, during the 1990s recession, Lawrence lost 5,000 more jobs or 20% of its industrial base. ⁷

When Lawrence's mills were in their heyday, their jobs attracted immigrants from throughout the world, giving Lawrence the name "Immigrant City." Lawrence continues to be home to a diverse population. Over the last 30 years, the ethnic white population who first made their homes in Lawrence has declined. Today, the majority of residents in Lawrence are Latino, primarily from Puerto Rico and the Dominican Republic. New immigrants are also coming from Southeast Asia. With families moving to Lawrence, the city has turned full circle from a city with a shrinking population to a city that is growing. Lawrence has the youngest population of residents in the state.⁸

Despite new growth, key indicators such as poverty, municipal finance, and housing affordability, show that Lawrence is one of the four "most significantly stressed" cities in Massachusetts. Only 32% of residents own their own home compared to 68% nationwide. Today the median income in Lawrence is \$27,983 compared to \$50,502 in Massachusetts. Although the percentage of residents who are unemployed in Lawrence has declined significantly since 1990, 15.2 % of residents are still unemployed today and 29% of residents have no high school degree. 10

What the Statistics Don't Show - A Comeback

Although these statistics indicate stress in Lawrence, they fail to show the grassroots activity in Lawrence and the strength of its community. These are the stories that speak to Lawrence's comeback and the mill district's readiness for redevelopment.

Lawrence CommunityWorks, for example, a nonprofit organization founded in 1986, now has 720 members, 20 staff and a board of 15, and has met much success in engaging the local community and empowering its residents. They call their economic

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⁷ Delgado, Manuel E. Spicket River Greenway Project, Lawrence, MA: teaching & learning design with the community. MIT Thesis, 2001.

⁸ Lawrence Community Works and MIT Department of Urban Studies and Planning. <u>Reviviendo Gateway Initiative website</u>, <u>www.avencia.com/lcw</u>, 2004.

⁹ Soule, David, and Joan Fitzgerald, Barry Bluestone. <u>The Rebirth of Older Industrial Cities: Exciting Opportunities</u>

⁹ Soule, David, and Joan Fitzgerald, Barry Bluestone. <u>The Rebirth of Older Industrial Cities: Exciting Opportunities for Private Sector Investment</u>. Center for Urban and Regional Policy, Northeastern University, April 2004.

Lawrence Community Works and MIT Department of Urban Studies and Planning. <u>Reviviendo Gateway Initiative website</u>, <u>www.avencia.com/lcw</u>, 2004.; Lawrence CommunityWorks. Some Good Things to Know About Lawrence Community Works Flyer, 2004; www.detma.org

development approach an 'invest in people' asset building approach." Today, Lawrence CommunityWorks is building quality affordable housing in existing buildings and on vacant lots; more than 200 families are also participating in the organization's Family Asset Building Program that helps people build "assets: including education, homeownership, savings; support each other; and work together to improve our community." 12

The Family Asset Building Program offers the following courses for teens – Young Architects, Young Webmasters, Young Videographers, Fashion Design, Savings Club/IDA, and College Preparation. Programs for adults include Savings and Financial Literacy, Preparing for Homeownership, English Club, and Computer Club. The programs for young people are introducing them to professions, exciting them about careers, and preparing them for college.

Programs for adults are also preparing people for work, and to invest in the community. For example, the Individual Development Account (IDA) program is helping women build assets "through individual savings matched by grants and federal funds. It focuses on planning, allowing participants to save for higher education, or purchasing a home." Through this program, more families are projected to become homeowners. Approximately, 90% of all homebuyers in Lawrence are Latino, indicating that these families are becoming strongly invested in the community. 14

Groundwork Lawrence, another nonprofit organization, is also improving the quality of life in Lawrence, while at the same time empowering residents. Their mission is "to bring about the sustained regeneration, improvement, and management of the physical environment by developing community based partnerships, which empower people, businesses and organizations to promote environmental, economic and social well being." Groundwork Lawrence has led a number of initiatives including the Spicket River Greenway project, which is working to build a trail along the Spicket River from the Merrimack River to Steven's Pond. 16

They are also preparing the mill district for redevelopment through a broad-based community planning project called the Reviviendo Gateway Initiative (RGI). This grassroots effort is jointly staffed by Groundwork and Lawrence CommunityWorks, with support from the city of Lawrence. With the active participation of hundreds of local residents, mill owners, businesspeople, cultural and community leaders, RGI is developing a canal and alleyways restoration plan, and creating a vision for the

¹¹ Lawrence Community Works and MIT Department of Urban Studies and Planning. <u>Reviviendo Gateway Initiative website</u>, <u>www.avencia.com/lcw</u>, 2004.; Lawrence CommunityWorks. Some Good Things to Know About Lawrence Community Works Flyer, 2004; www.detma.org

¹² Lawrence CommunityWorks. Our House Nuestra Casa, Family Learning Center Flyer, 2004.

¹³ Lawrence CommunityWorks. People and Place, Individual Development Accounts, Technology and Community Revitalization Flyer, 2004.

¹⁴ Lawrence Community Works and MIT Department of Urban Studies and Planning. <u>Reviviendo Gateway Initiative website</u>, <u>www.avencia.com/lcw</u>, 2004.

¹⁵ Super, Maggie. Groundwork Lawrence. June 2004

¹⁶ ISIP

transformation of the mill district. Already, RGI has held design charrettes, such as the Methuen/Canal Street charrette, to create visual community-based plans for the redevelopment of key parcels in the mill district. It also worked with the city to modify zoning to support housing and artist live/work space in the mill district.

Groundwork Lawrence has also expanded its efforts to the entire city through the Parks Improvement Plan, which has resulted in comprehensive upgrades to 22 of the City's parks. Groundwork Lawrence has also met success in working with community partners to create the Reviviendo Playground, the Essex Art Center Art Alley, and the City's first residential "Green Alleyway." In addition to these projects, Groundwork has partnered with the City to update its Open Space Plan, design and implement downtown streetscape improvements, conduct a citywide street tree survey, and build a new parking lot and trailhead at Den Rock Park. In concert with these planning and design projects, Groundwork is committed to linking people and their environment through a variety of educational and job-training programs, including their summer "Green Team," the Lawrence Outdoor Youth Corps, and the Ambiente brownfield job training program.

Lawrence Historic Commission is supporting restoration work in and around the mill district. As Lee Balcolm, Chair of the Historic Commission explained, with city infrastructure projects, "All the money goes into the cake, but no money is left for the frosting." He says that part of the Historic Commission's mission is to add some of the frosting. Thus far the frosting has included restoring the Bicknell Clock at the State Historic Park and securing \$5.5 million in funds to restore the Veterans Memorial Stadium, which was slated to be demolished.



Lawrence Heritage State Park's museum is in the heart of Lawrence's mill district in this historic boarding house.

The Hope Street Youth Center, now part of Lawrence CommunityWorks, the Essex Art Center, Lawrence History Center, Lawrence Heritage State Park, Robert Frost Foundation, and Lawrence Cultural Alliance are also key organizations working to improve the city. As Grogan and Proscio, the authors of Comeback Cities, explain, grassroots efforts like these are the first indicators of a community comeback. In their opinion, the first indicator of a recovery is "the maturing of a huge, rapidly expanding grassroots revitalization movement in America. Ordinary residents of the inner city have formed thousands of neighborhood-based nonprofit organizations... They have used these organizations to invest in their assets...They have built and renovated thousands

of houses and apartments, recruited businesses into their neighborhoods, organized childcare centers and charter schools, and formed block watches and civic clubs."¹⁷

Similarly in Lawrence, grassroots efforts have resulted in \$10 million in neighborhood investments, 25 new affordable housing units, 2 new playgrounds, the acquisition of an abandoned school and 6 vacant lots for redevelopment, the establishment of new zoning in the mill district to stimulate redevelopment, and the establishment of NeighborCircles, a program that gives voices to people at the neighborhood level. And these are just the accomplishments of Lawrence CommunityWorks to date.

Efforts like these have succeeded in Lawrence, not just because of the leadership of strong community development organizations, but also because of the cooperative atmosphere that has been fostered in the city. Mill owners and business people are taking a leadership role – they sit on committees, participate in planning activities, and they volunteer their space for events. Residents are also volunteering for neighborhood clean up days, participating in planning activities and enrolling in programs.



One Mill Street is a successful canalside restaurant on Canal Street.

Chet Sidell, the owner of four mills in Lawrence, sees grassroots efforts creating a "change in the young people". He says young people are meeting success by taking part in programs such as Lawrence CommunityWorks Young Professionals program and the Hope Street Youth Center, which offers training in the performing arts.

¹⁷ Grogan, Paul S. and Tony Proscio. <u>Comeback Cities, A Blueprint for Urban Neighborhood Revival</u>. Westview Press, 2000.

¹⁸ Lawrence Community Works. <u>Some Good Things to Know About Lawrence Community Works Flyer</u>, 2004.



Canal Street (left) was renovated for offices in 2000. Today it is home to a number of nonprofits, consultants, startups, and artists. Although most of Duck Mill (right) is vacant, its lower floor houses All Things Sicilian, a very successful specialty store.

Another 'Comeback Cities' indicator is thriving small businesses. Today in Lawrence, successful small businesses can be seen throughout the city and in the mill district. For example, 60 Island Street in the mill district houses tenants, including Cambridge College, nonprofits, software companies, consultants, startups, and artists. Across the street, the Everett Mill houses Mad Doc Gaming Company, as well as many other office tenants. Recently, the 1 Mill Street restaurant opened in a renovated building along Canal Street. Today it boasts patrons that enjoy good food, a historic atmosphere, and canal-side dining. There is also a growth in storefront businesses along the city's main commercial streets including Essex Street, Broadway, South and Union.

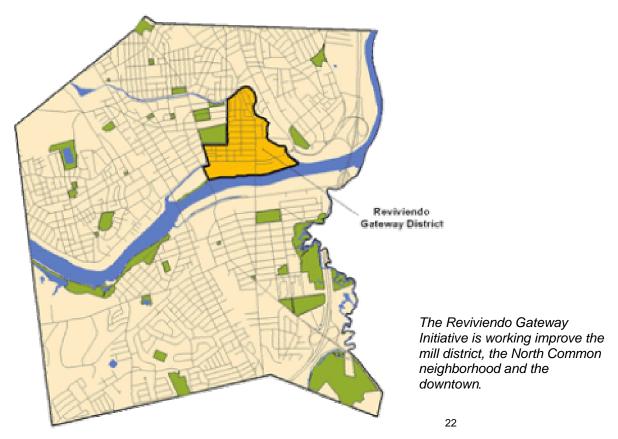
Another 'Comeback Cities' indicator is the "unshackling of inner-city life from the giant bureaucracies..." Today, Lawrence CommunityWorks and Groundwork Lawrence are creating a forum for residents, mill owners, government, business people, and other leaders to collaborate on community planning efforts. For example, the NeighborCircle campaign, organized by Lawrence CommunityWorks, is stimulating "relationship building and local action among neighbors in Lawrence's diverse neighborhoods." Already this effort has resulted in 14 circles and 5 property improvement committees working on neighborhood improvements on their blocks.

The Reviviendo Gateway Initiative (RGI) has also not only given more community members a voice, but they have begun to set the stage for the redevelopment of the mill district. This coalition has become a powerful force in Lawrence. Together, this diverse team has "organized and won a "Zoning Overlay District," the first major zoning change in the city since 1946, which will stimulate investment in the mill district, allow for greater density of development in neighborhoods, and require an affordable housing component for all major residential development."²¹

¹⁹ Grogan, Paul S. and Tony Proscio. <u>Comeback Cities, A Blueprint for Urban Neighborhood Revival</u>. Westview Press, 2000.

²⁰ ISIP

²¹ Lawrence Community Works. Some Good Things to Know About Lawrence Community Works Flyer, 2004.



In addition to these 'Comeback Cities' indicators, Lawrence community members are also talking about change. Both Chet and Gary Sidell feel that the mill district is ripe for new development. They see a number of indicators of the area's readiness, such as the new commuter train station²³, the Lawrence Gateway Project,²⁴ highway improvements, and new businesses such as Wells Fargo and a number of software companies. The Sidells call these jobs Lawrence's "new manufacturing jobs." Chet Sidell also says that a big economic indicator is that staff from the two nonprofits, Groundwork Lawrence and Lawrence CommunityWorks, are moving from places like Cambridge to make Lawrence their home.

Jennelle Graziano, a real estate agent and Lawrence resident for 24 years, adds to the Sidells' list. The "school district is building a new high school, which should alleviate some potential homeowners concerns about the schools. The Gateway Project is also underway, which should improve Lawrence's image. Plus Lawrence already has a great location. It has easy highway access and is a half hour from two major airports, Logan and Manchester, New Hampshire. Efforts are also being made by the new mayor to sell vacant lots and build new housing."

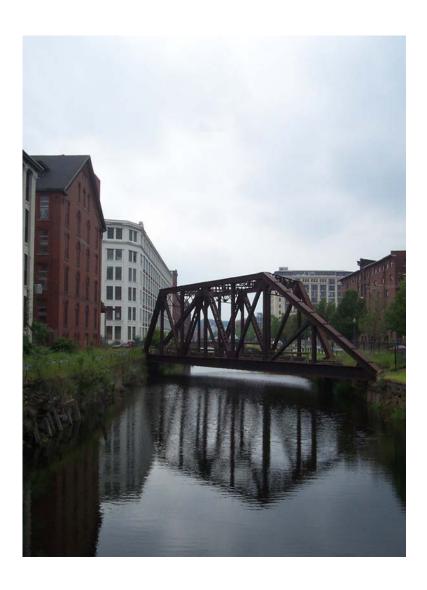
²² Overlay on top of map from Lawrence Community Works and MIT Department of Urban Studies and Planning. Reviviendo Gateway Initiative website, www.avencia.com/lcw, 2004.

²³ The new commuter station is opening in 2005 directly across from the Wood Mill.

²⁴ Lawrence Gateway Project is a \$150 million public/private project underway intended to improve the entrance to the city from Route 495, create new transportation access, and support economic growth.

Bob Ansin is so certain of Lawrence's potential that he recently purchased the Wood Mill and plans to develop it as a green mixed use project. Assets like "a navigable river, public transit, and great people" make Lawrence's mill district ready for redevelopment. As Ansin explains, Lawrence has "as an energy more than anything, versus the collective depression" seen in some mill towns. Similarly, Chet Sidell says "There's a better spirit here today."

Taken together these indicators may be considered a comeback. In combination with mill owners' readiness to do something with their mills, developers beginning to approach mill owners, the increasing popularity of mills for residential lofts, and a hot housing market in the Boston area, Lawrence's mill district seems ready for redevelopment.



Chapter III. Barriers to Development

Key Concepts and Conclusions

A number of barriers to development exist in Lawrence's mill district that together has all but prevented residential development. These barriers can be summarized as follows:

- 1. Mill Owner's Dilemma Mill owners are not selling their mills to developers or redeveloping the mills themselves. This is because some owners want to keep the mills in their families, but cannot redevelop alone, because of the associated risks and costs. Other owners who own more than one mill may fear that if they sell one, the value of their other properties may decrease. Furthermore, even if mill owners want to sell and can get over these other two obstacles, they may not accept the offered price, because mill owners tend to overvalue their mills, while developers tend to undervalue the mills.
- 2. Government Barrier The local government in Lawrence has limited capacity and as a result can seriously delay and handicap development projects. Developers rely on the city as a conduit for local, state, and federal funding. They must also rely on the city for all approvals, permits, and certificates of occupancy. Any delays or mishaps caused by local government can be extremely costly and in the worst case scenario cause default.
- 3. Costly Conversion Barrier Converting mills into housing can be more expensive than a new construction project both in terms of construction costs and operating costs. Some of the factors that make mill conversions especially expensive include: limited parking, inefficient building dimensions, hidden costs discovered once construction is underway, and high operating costs after renovation.
- 4. Why Lawrence? Barrier On paper, Lawrence's statistics make developers and future residents hesitant to invest. Compounded with the fact that the market for mill conversions in Lawrence is virtually untested, investors and future residents will think twice before putting cash and time into mill conversion projects. This is especially true when similar projects exist in so many other cities that may be more desirable because they have tested conversion markets, they are closer to Boston, and/or they have more community amenities.

In short, Lawrence can be an expensive and risky place to do business. In other cities that have strong tested markets for mill conversion projects and where Barrier 4 is less of an issue, the first three barriers can be more easily overcome. However, in Lawrence these factors have remained barriers. In the mill district, the hard costs of redevelopment are just as high as they are in the rest of the region, but projected prices and rents have historically been too low to support redevelopment of the mills. Because of the tight margin between pricing and costs, no buffer or room for error exists. As a result, these barriers have become magnified in Lawrence.

With this in mind, from this point forward, I will proceed with "cautious optimism" when discussing the potential for redevelopment in Lawrence's mill district. Factors contributing to Lawrence's comeback could support redevelopment, but they are not answers in themselves. Specific actions must be taken to dismantle these barriers.

Current Development Efforts

Even though Lawrence has many positive attributes that lead one to believe that residential mill conversions are possible, there are still many barriers to development. Thus far, these barriers have prevented all but one residential mill conversion in Lawrence, and that project opened its doors in 1989.

To date, most mill conversions have occurred haphazardly in Lawrence, as industry left the area and mill owners fell into the real estate business almost by accident. For example, the Sidells had purchased the 140,000 square foot 60 Island Street mill as the headquarters of KGR, a women's apparel company. When their company closed its doors in October of 2000, they advertised the mill as office space. By November of 2000 their first commercial tenant was in the building. As more tenants moved in, the Sidells modified the space accordingly. To this day, they do all the leasing themselves. Chet Sidell explains that "The businesses we like dictate the design." Currently 75% of this building is occupied. The Paleys, the owners of the Everett and Stone Mills have taken a similar approach. The Everett Mill is now 50% occupied with office and light industry. Everett Mill is now 50% occupied with office and light industry.



In 2000, the Sidells began renting office space at 60 Island Street.



The Everett Mill is 50% occupied, with both light industrial and office tenants.

²⁵ Sidell, Chester. President, KGR. Interview, June 2004; Sidell, Gary. Vice President, KGR. Interview, June 2004

²⁶ Paley, Marianne. Executive Director, Groundwork Lawrence. Interview, June 2004

Why hasn't more formal and lucrative development taken place in Lawrence, and more importantly, how can development be taken to the next level to benefit residents, mill owners, and future residents of the mill district?

Barriers to Development – The Mill Owner's Dilemma

The answer to these questions is complex. Part of the answer lies in the market, as will be discussed in the next chapter. In short, the margin between the price or rent that can be achieved for housing in Lawrence and the cost of converting a mill is very tight. Until recently with the market upturn, it has not been profitable to convert the mills into housing.

Another issue is what I call the mill owner's dilemma. As of yet, development has not met the needs of most owners. It has been too risky for them to undertake. A few owners interviewed said they hesitated to part with their buildings, even when approached by developers with offers to purchase. However, at least two mill owners have overcome this barrier and are in negotiations with developers or are seriously exploring residential development.

Marianne Paley, executive director of Groundwork Lawrence and daughter of a mill owner, explains the owner's dilemma best. She says that mill owners are in unique predicament. These buildings are all family owned, generally by multiple generations of family members. Most mills are generating income that has ongoing value to their families. Paley feels that most mill owners can't or don't want to risk the capital needed to convert mills into housing. But they also do not want to sell the mills to developers who will convert them into housing. They want the mills to stay in their families, and continue to generate income for the next generations. Thus, the owner's dilemma – even though owners want the mills to be redeveloped, owners cannot develop the mills themselves because it is too risky and they do not have the capital. Yet, the only way the mills can be redeveloped is if they sell, but many owners are not willing to sell.

Mill owners can also be challenged if they own a number of mills, and selling would decrease the value of other mills in their portfolio. For example, the Sidells own four mills in Lawrence. They have already converted one mill into office space. This building has only 20 parking spaces, so tenants park at the Duck Mill across the street. Even though the Sidells have had discussions with developers about the Duck Mill, they have not been able to make anything work to date, because if they lose control of the Duck Mill parking, their 60 Island Street tenants will have no parking.²⁷

Furthermore, offers mill owners are receiving tend not to meet their expectations. Mill owners do not know the fair price of their mills, because there are few sale precedents in Lawrence. Mill owners fear being taken advantage of, especially when prices seem to keep appreciating in Lawrence. Owners also tend to overvalue their assets, because their gut tells them that their mill must be worth a lot, because the mills are physically so

²⁷ Sidell, Chester. President, KGR. Interview, June 2004

substantial. Owners also tend to gauge the value of their mills on how much they would be worth after renovation, instead of what they are worth today. Equally problematic is that, as Marianne Paley explains, "Outside developers tend to undervalue the mills." They are under the impression that the mills are vacant or completely underutilized, when most of them are occupied. As a result, outsiders tend to offer less than they are worth. She says "developers need to understand that mills are underutilized, but not vacant shells, so they're not cheap or free." Thus, the offered prices do not meet the mill owners' needs and the mills continue to sit.

So in short, the mills remain undeveloped. This may be because mill owners do not want to sell their mills to developers, but they do not have the resources to redevelop the mills themselves. Additionally, because owners tend to own more than one mill, owners fear that if they sell one, such as agreement may decrease the value of their other mills and have a negative overall effect. Furthermore, even if a mill owner still wants to sell and can get over these other two problems, they may not accept the offered price, because mill owners tend to overvalue their mills, while developers tend to undervalue the mills.

Deal Breakers

The mill owners' dilemma is just one of many barriers to development in Lawrence's mill district. The National Association of Industrial and Office Properties and the Center for Urban and Regional Policy at Northeastern University also identified five other deal breakers that stall development in communities such as Lawrence. This study specifically looked at commercial and industrial development in mills. However the concepts discussed are applicable to residential projects and were echoed again and again during interviews for this report.

<u>Deal breaker 1</u>. "Municipal leaders in older industrial cities... are not always fully prepared to assist firms in a timely and effective manner, helping to overcome obstacles to inner city investment.

<u>Deal Breaker 2</u>. Business decision makers have well-defined cognitive maps – perceptions or expectations – about the attributes of and opportunities in older industrial cities that can adversely affect the way they think about locating in these urban locations.

<u>Deal Breaker 3</u>. Specific urban site deficiencies can add excessive costs to doing business in older industrial cities.

<u>Deal Breaker 4</u>. State and local review processes can add excessive costs to doing business in older industrial cities.

<u>Deal Breaker 5</u>. Traditional public sector financial tools such as tax abatements, tax credits, and subsidies, while often strategically important as a deal closer, are not sufficient to attract high value business investment if previous deal breakers are not overcome."²⁸

Soule, David, and Joan Fitzgerald, Barry Bluestone. <u>The Rebirth of Older Industrial Cities: Exciting Opportunities for Private Sector Investment</u>. Center for Urban and Regional Policy, Northeastern University, April 2004.

Interviews conducted over the course of this research supports that the above-mentioned deal breakers are alive and well in Lawrence. In Lawrence, these deal breakers seem to fall under three main categories, what I call the *Government Barrier* (Deal Breakers 1 and 4), the *Costly Conversion Barrier* (Deal Breaker 3), and the *Why Lawrence? Barrier* (Deal Breakers 2 and 5). In the following sections, I will elaborate on the factors that contribute to each of these barriers in Lawrence. In later chapters, examples of how to avoid these barriers will be presented.

The Government Barrier

During interviews, Lawrence's government was noted again and again as a deterrent to development. For example, an anonymous interviewee reflects that although there are many good people in the city government, the government does have its limitations and can demonstrate some irrational behavior. Because the city is the conduit for federal and state financing including HOME and CBDG funding, and because the government also controls the permitting and zoning process, investors can be scared off.

An example of what can happen if the government is too slow with issuing permits or completing building inspections is demonstrated with the example of historic tax credits. Historic tax credits pay for approximately 20% of a project, and often make mill conversions feasible. To turn the tax credits into cash that can be used to pay for the project, developers sell these tax credits to corporations when they receive their certificate of occupancy. Before the project is complete, the developer makes an agreement with the corporation to give the tax credits to them by the close of a specific fiscal year. If the city holds up the issuance of the certificate of occupancy or any other step in the process and the developer misses the tax credit deadline, they have to pay hefty fines to the corporation who was intending to purchase the credits. In addition to fines, the corporation will have no tax credits to buy, and will therefore not give the developer cash for the credits. Without cash, the developer may not be able to make debt payments, and the building could go into default.²⁹ As can be seen from this example, if a city drags their feet for even just a few months, the effects can be substantial.

Other practitioners reiterate this concern. For example, Lee Balcolm says that "Things are happening from outside private money, like the Wood Mill, the Sidells, and Bert Paley (owner of the Everett Mill) and from state and federal money, like the transportation center. But the city itself lacks some consistency." Jim

²⁹ Maxwell, Tom. Principal, MMA Financial, LLC. Interview, June 2004

Sperling, the lawyer for the Mass Mills project in Lowell and with a background in planning, says the results of poor governance can be extremely detrimental. Sperling believes that Lowell has been more successful than Lawrence in its redevelopment efforts, because "During the Tsongas era there was a collective effort. There was a will to revitalize the city and that will was demonstrated through infrastructure improvements and zoning codes. In Lawrence there hasn't been the city will. The diverse population and disorganized government make cohesion difficult."

Costly Conversion Barrier

In addition to limitations of the local government, a building's physical limitations can also stall development. The 'costly conversion barrier,' parallel's Deal Breaker # 3 - "specific urban site deficiencies can add excessive costs to doing business in older industrial cities." Some of the physical limitations to development in Lawrence include parking, environmental contamination, building configuration, unexpected costs of renovation, and energy issues. In the following sections, each of these physical limitations that add cost to development will be discussed.

<u>Parking.</u> Mill owners, nonprofit staff, and city officials perceive that one of the major limitations to development in Lawrence is the limited parking. Mill districts, by design have limited available space, because they were built before the car and for efficiency reasons, were built to be close to one another.³¹



Parking limitations in the mill district is a barrier to redevelopment.

As mentioned previously, when Chet Sidell describes why he purchased the 120,000 square foot Duck Mill in 1993, he explains "I bought a parking lot that happened to have a building on it." He already owned the 60 Island Street building and he needed more parking to support his employees. Over 10 years later, the Sidells are ready to convert the Duck Mill into housing, but only if 60 Island Street has enough parking.

Soule, David, and Joan Fitzgerald, Barry Bluestone. <u>The Rebirth of Older Industrial Cities: Exciting Opportunities for Private Sector Investment</u>. Center for Urban and Regional Policy, Northeastern University, April 2004.

³¹ Sperling, James D. Attorney, Rubin and Rudman, LLP. Interview, June 2004; Balcom, R. Lee. SOHAR. Interview, June 2004

The Paleys are also eager to add more tenants to the Everett Mill, which is fifty percent vacant, and convert their adjacent Stone Mill into housing or offices. However their plans are stalled, because they do not have the parking.³²

<u>Building Size and Dimensions.</u> Another site and configuration issue is the actual size and dimensions of the mills. The ideal configuration for housing is approximately 60 to 65 feet wide. This depth allows enough space for living, while letting light into the units. If the building is too wide, the building's floor layout will be less efficient and the units could be less desirable and more costly to construct. For example, if the building is 90 feet wide, the units would be long and narrow with dark space closer to the hallway. Long and narrow residential units would be less desirable to the tenant, but cost more to construct, because there is more space, and more space requires more materials.

<u>Hidden Costs of Renovation.</u> The other limitation to redevelopment is the hidden costs that come with any renovation. As a rule, new construction tends to be much easier to price, because building professionals know how much materials are needed and what work needs to be done, prior to construction. On the other hand, in a conversion project, the construction crew may discover structural problems or other issues, like environmental contamination. Of course this throws off cost projections and the budget.

Operating Costs. Another deterrent to redevelopment of the mills is what happens after the mills are converted - operating expenses. One of the challenges of converting a mill into housing is the high energy costs associated with occupying a renovated mill building. As Michael Algona, an engineer, explained, "Mills have huge ceilings and huge window walls with large mass. They were built when energy was cheap and no concern, but daylight was a big concern." Insulation is a challenge, especially when the market calls for exposed brick and historic commissions want the original windows restored. As a result, operating expenses can be much higher than in a new construction project.



With large windows and exposed interior brick, mill buildings can be expensive to heat.

 $^{^{\}rm 32}$ Paley, Marianne. Executive Director, Groundwork Lawrence. Interview, June 2004

Why Lawrence? Barrier

In addition to the government barrier and the costly conversion barrier, the *Why Lawrence? Barrier* may be one of Lawrence's biggest problems. It will be discussed further in the marketing section. However, in summary, solutions need to solve the following questions - Why develop in Lawrence's mill district and why move to Lawrence's mill district, as opposed to a community where mill conversions have already been tested? Why wouldn't a developer, investor, or future resident for that matter chose a project in a community that looks better on paper from a statistical point of view or a project in one of the other third tier cities that happen to be closer to Boston. Unless Lawrence can distinguish itself from other communities, the mills will struggle to be redeveloped. However, if a strong collaborative redevelopment strategy is organized, something community members have already initiated, these barriers may be overcome, making redevelopment achievable.

Chapter IV. Lawrence's Changing Housing Market

Key Concepts and Conclusions

Market pricing and rents largely dictate the feasibility of development in a community. Lawrence's housing prices and rents depend heavily on the volatility of the eastern Massachusetts housing market, of which it is a part.

In the 1980s, the height of the most recent housing cycle, prices in Lawrence appreciated by 186%, thus following and even exceeding the average appreciation rates in eastern Massachusetts (175%). It was during this period that many development projects opened their doors in Lawrence, including Museum Square, the only residential mill conversion project in the city. However, in the late 1980s to early 1990s, when the housing bubble burst in eastern Massachusetts, Lawrence and cities like it suffered most from severe price drops. At this time, mill conversion projects in Lawrence came to a halt.

After a slow recovery in the late 1990s, prices have again appreciated considerably in Lawrence, resembling price increases seen only in the 1980s. High prices and rents present a new opportunity for development in the mill district, as prices and rents may exceed the cost of redevelopment.

However, given historical trends, mill owners and developers need to be cautious about relying too heavily on today's market when determining the feasibility of conversion projects. Key studies indicate that eastern Massachusetts is once again in a bubble. This condition seems likely because housing prices have grown at a considerably higher rate than income, interest rates, and employment. Likewise in Lawrence, prices have risen while income remains low and unemployment rates remain some of the highest in the state.

If there is a bubble, pricing and rents will drop in all parts of eastern Massachusetts. Yet, because the economy is stronger and interest rates are lower, prices will probably not fall as significantly as they did in the early 1990s. However, Lawrence and other third tier cities, will likely feel the effects of the burst the most, even if grassroots activities and more local investment buffer their fall.

With that said, developers should proceed with caution when developing in Lawrence and not base financial projections on pricing above the current Lawrence market, regardless of how impressive the new mill conversion projects will be. Pricing and rents can always be raised if this theory fails to be true, when mill conversions open their doors. Details of a conservative pricing approach will be discussed in Chapter V.

The 1980s and Early 1990s – The Most Recent Housing Cycle

Lawrence is part of the Boston metropolitan housing market and it follows overall trends of that market. Since 1982, the general trend in eastern Massachusetts has been for prices to appreciate considerably. Lawrence has followed this trend. During the 1980s. the height of the last housing cycle, single family homes appreciated most in towns and cities like Lawrence, which are furthest from Boston and which had the lowest initial prices. Yet when prices began to decline in the early 1990s, these same towns and cities suffered most, as prices fell dramatically.³³



View of Lawrence from Tower Hill.

During the 1980s boom period, single family home prices increased in eastern Massachusetts on average by 175 percent, between 1984 to 1989. In the Lawrence, Lowell, Methuen, and Haverhill submarket, single family home prices increased by 186 Communities like Lawrence with the lowest initial values had the most appreciation." ³⁴ Part of the reason why prices appreciated faster in these communities was because their prices were initially so low, so they had more room to grow. The other reason was that as prices increased faster than income, people could not afford more expensive towns, so as one study showed, "the rush to home ownership clearly was concentrated in the low-priced towns, which were the only towns with houses that middle-income households could afford to buy." 35

Unfortunately, pricing during this period could not be sustained. Pricing was severely disconnected from the economic realities of the region. Research shows that based on income growth, employment growth, interest rates, and construction costs, prices in the

³³ Case, Karl E. and Christopher J. Mayer, The Housing Cycle in Eastern Massachusetts: Variations among Cities and Towns. New England Economic Review, March/April 1995, pp. 24-40

³⁴ Case, Karl E. and Robert J. Shiller, "Is There a Bubble in the Housing Market?" <u>Brookings Papers on Economic</u>

Activity, 2:2003.

35 Case, Karl E. and Christopher J. Mayer, The Housing Cycle in Eastern Massachusetts: Variations among Cities and Towns. New England Economic Review, March/April 1995, pp. 24-40

Boston region should have only increased by 15 percent, yet in reality they increased many times that amount.³⁶

Looking back, real estate experts acknowledge that during this period, the housing market was in a bubble. Case and Shiller define a housing bubble as

> "a situation in which excessive public expectations of future price increases cause prices to be temporarily elevated. During a housing bubble. homebuyers think that a home that they would normally consider too expensive for them is now an acceptable purchase because they will be compensated by significant further price increases. They will not need to save as much as they otherwise might, because they expect the increase value of their home to do the savings for them. First time homebuyers may also worry during a housing bubble that if they do not buy now, they will not be able to afford a home later. Furthermore, the expectation of large price increases may have a strong impact on demand if people think that home prices are very likely to fall, and certainty not likely to fall for long, so that there is little perceived risk associated with an investment in a home."

Between 1989 and 1991, the eastern Massachusetts housing bubble popped. The value of housing stock declined in Lawrence, Lowell, Brockton, Bridgewater, Fitchburg, and Leominster by 21 percent. This group of towns and cities followed only Boston (22 percent), in terms of the largest drop in housing value. Case and Mayer attribute this decline to three factors 1) an excess supply of housing, 2) a national recession, and 3) a severe regional recession. In Lawrence, these factors were compounded by the loss of 46% of its manufacturing jobs during this same period.³⁸

Kristen Harol at Lawrence CommunityWorks explained that during the early 1990s, housing stock became worth less than the mortgages. As a result, as prices dropped, over 1000 units were abandoned, demolished, or burned. Some arson resulted as some landlords allegedly went after insurance money.³⁹

Lawrence CommunityWorks was restructured five years ago at the tail end of this low period in Lawrence's housing market. As Harol explained, "At that point, the housing supply was not a big problem. People came to Lawrence because it was affordable."40 It is important to note that cities like Lawrence with lower median incomes, lower-quality schools, and higher crime rates had few signs of recovery by mid 1994. However, towns with the best schools and closest to Boston recovered fastest.⁴¹

³⁶ Case, Karl E. and Robert J. Shiller, "Is There a Bubble in the Housing Market?" <u>Brookings Papers on Economic</u> Activity, 2:2003.

³⁸ Case, Karl E. and Christopher J. Mayer, "The Housing Cycle in Eastern Massachusetts: Variations among Cities and Towns." New England Economic Review, March/April 1995, pp. 24-40

³⁹ Harol, Kristin. Deputy Director, Lawrence CommunityWorks. Interview, June 2004

⁴¹ Case, Karl E. and Christopher J. Mayer, The Housing Cycle in Eastern Massachusetts: Variations among Cities and Towns. New England Economic Review, March/April 1995, pp. 24-40

The Current Housing Cycle

Throughout the mid 1990s, the eastern Massachusetts housing market had recovered. By the late 1990s, prices were once again increasing rapidly. However, up until 2000, Lawrence was not part of the housing boom that came out of the late 1990s housing recovery period. But by 2000, rents and housing prices were increasing. As rents increased in Lawrence, purchasing a home became more desirable to residents. With more families on the market, housing prices were bid up further. As a result, families that purchased multifamily homes ended up charging higher rents for their remaining units, because they had to carry higher mortgages, perpetuating the cycle.

Jennelle Graziano, a realtor for Coco, Early and Associates, has monitored the real estate market in Lawrence for many years. As prices climbed, Graziano says "People can't afford the high prices. People are selling and buying for less." She observes that it is rather common for families to move to Springfield, Fitchburg, and Rhode Island in search for either less expensive rent or an opportunity to buy a home for the first time or buy a better home with the profit they made when they sold their home in Lawrence.

Graziano described the following scenario. Quite often families who own homes in Lawrence are selling and moving to Florida; "they can sell because the market is so high." They want to move to Florida because the weather is better and overall it is a more desirable place to live. They feel like they can do it financially because of the high price they can get for their home. These are not elderly people; instead they are families with young children who are willing to take the risk because they may be making "\$150,000 by selling their home." Often they move to these new regions with no employment. Graziano explains that sometimes they have to come back.

As current residents move to Florida and other locales they are being replaced by Latino families from Lynn, Revere, Chelsea, and Jamaica Plain who can no longer afford the high rents in their respective communities. Graziano also observes a demographic shift. Seven years ago she says most families in Lawrence were from the Dominican Republic and Puerto Rico. Now families are coming more and more from Central America. These families may have been living in Lynn, Revere, Chelsea, and Jamaica Plain for the last ten years after having had immigrated to the US, but now they are moving to Lawrence, because they can no longer afford the high prices in these traditionally blue collar communities.⁴³

Although prices and rents have increased significantly in Lawrence and continue to be strong, William Torres, Museum Square property manager, notices some softening of the rental market. He says "A few years back there were tons of renters." Renters could not negotiate because there was limited supply. Now "even some of the Section 8 residents are getting picky." To address this softening market, rental deals are returning to Lawrence. For example, Torres may offer new residents the first month

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⁴² Harol, Kristin. Deputy Director, Lawrence CommunityWorks. Interview, June 2004

⁴³ Graziano, Jennelle. Realtor, Coco, Early and Associates. Interview, June 2004

⁴⁴ Torres, William. Property Manager, Museum Square. Interview, June 2004

free rent or wave the security deposit.⁴⁵ The softening rental market follows a trend seen elsewhere in Massachusetts, as more people buy, encouraged by lower interest rates, and demand for rentals fall.

What is in Lawrence's Future? The Fear of the Bubble.

For the first time in years, Lawrence is again experiencing a housing boom. Current rents and prices may be able to support redevelopment of the mills. Recall that it was the housing boom of the 1980s that enabled developers to build Museum Square, the only residential mill conversion in Lawrence to date.

However, if redevelopment is feasible, because of current market conditions, it needs to be asked whether or not those market conditions will be sustained two or three years down the road when mill conversion projects in Lawrence open their doors. Part of the answer to this question is hinged on whether or not eastern Massachusetts is in a housing bubble, as it was in the 1980s.

Case and Shiller look at this very question. First they examined whether or not increased housing prices could be explained by factors such as increased income, interest rates, employment, etc. They also surveyed residents in Boston, Los Angeles, Milwaukee, and San Francisco and compared their results to a similar survey done in 1988. The first part of the analysis showed that in all but eight states, including Massachusetts, "income alone explains patterns of home price changes since 1985" These data support the possibility of a housing bubble in Massachusetts, where income patterns cannot explain rising prices. The second part of this analysis, the survey, also indicates that homebuyers have irrational perceptions about pricing, as they did in the last housing bubble.46

This study concludes that "although indicators do not suggest such strong evidence of a bubble as was observed in 1988, it is reasonable to suppose that in the near future price increases will stall, and that prices will even decline, in some cities.... The consequences of such a fall in prices would be severe for some homeowners. Given the high average level of personal debt relative to personal income, an increase in bankruptcy is likely. Such an increase could potentially worsen consumer confidence, creating a renewed interest in replenishing savings."47

Studies like these predict the strong possibility that the region is in a bubble. Although the verdict will be out until or if the market falls, if the bubble were to burst, the effects could be substantial in a city like Lawrence and on development projects in the mill district. Communities like Lawrence will likely be hit the hardest, as they were in the 1980s.

⁴⁵ Torres, William. Property Manager, Museum Square. Interview, June 2004

⁴⁶ Case, Karl E. and Robert J. Shiller, "Is There a Bubble in the Housing Market?" <u>Brookings Papers on Economic</u> Activity, 2:2003.

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However, housing prices will probably not fall as much as they did in the 1980s (24%). Grassroots efforts, increased local investment⁴⁸, and a better overall economy could buffer the fall. However, even a 5% drop in prices (which seems very likely) and even worse, a 20% drop in prices (which seems possible, although less likely), could have staggering community-wide effects.

With the possibility that prices could drop, conservative price and rent projections should be used when considering the viability of redevelopment in the mill district. If projects can work, even with conservative pricing, development will be more likely to succeed in the event that the bubble pops. Detailed pricing and rent projections will be discussed in the next chapter.

⁴⁸ Kristen Harol observes that new immigrants "have more financial stake in the city where they didn't 14 years ago." Jennelle Graziano explained that in the past, families sent their money back to their home countries. However because the value of money is decreasing in countries such as the Dominican Republic, families are choosing to invest locally. More families are also planning on staying in the US.

Chapter V. The Market for Housing in the Mill District

Key Concepts and Conclusions

The following represents my final conclusions for pricing and rent projections for mill conversions in Lawrence. These are conservative price and rent estimates. The condo projections range from between 5 and 10% below the top of the market in Lawrence to just below the average current prices. The rent projections hover around the average rent trend line of Lawrence's highest priced apartment complexes. All projections fall at or under the average prices and rents of comparable conversion projects in other third tier cities including Lowell, Lynn, and Brockton. Pricing and rent projections are as follows:

Conservative Estimated Sales Price for Mill Conversions in Lawrence				
Unit Size ⁴⁹	Price/Square Foot	Total Price		
800 Square Feet	\$165 to \$188	\$132,000 to \$150,400		
950 Square Feet	\$160 to \$179	\$152,000 to \$169,670		
1100 Square Feet	\$143 to \$160	\$157,300 to \$176,000		

Conservative Estimated Rent for Mill Conversions in Lawrence			
Unit Size	Average Rent/Square Foot		
less than 950 SF	\$1.20 to \$1.45		
900 SF to 1200 SF	\$1.10 to \$1.20		

Mill conversions will likely be newer and more desirable than current condos and rental units on the market in Lawrence, and thus could likely achieve higher price points than those projected. However, I argue that given the risks associated with the Lawrence market, a conservative approach is most appropriate for determining the financial feasibility of these projects. Prices and rents can be raised if the demand for such units is strong, when mills open their doors. However, it is much more difficult to lower prices and rents, if the market proves otherwise.

Risks include:

- An untested market for the residential mill conversion product, which means that demand is difficult to estimate, and achievable pricing and resale values are unknown.
- The Why Lawrence? Barrier (Chapter III) that makes it more difficult for Lawrence to compete relative to communities closer to Boston and with more amenities.
- The possibility that prices and rents could fall by the time new projects open their doors, if the regional housing bubble bursts (Chapter IV).
- The absorption dilemma, which could be caused by too many units coming on the market at once. If supply exceeds demand, pricing and rents will decrease in Lawrence.

In addition to these projections, the other major conclusion that this chapter makes is that rentals will offer more protection against the risk of absorption than condos. Combined with subsidies that support rental projects, as will be discussed in Chapter VI, rentals may be more viable, especially for the first few conversion projects on the market.

⁴⁹ The size of the unit is the rentable space of the unit only. It does not include the building's common spaces, amenities, hallways, storage rooms, ect.

Approaches to Making Pricing and Rent Projections – Two Case Studies

One of the major challenges to determining a pricing and rental schedule for mill conversions in Lawrence is that like other third tier cities, comparable projects within the city are limited to nonexistent. There is only one other residential mill conversion project in Lawrence, Museum Square, a 176 unit rental building. Condominiums in Lawrence are located in older multifamily houses or apartment complexes built in the 1980s. Surrounding communities also have a much different market than Lawrence, which makes inferring prices from other mill projects difficult. Many factors influence pricing between towns and cities. For example, Jennelle Graziano, a realtor, claims that a three family home in Methuen, a bordering town, costs at least \$75,000 more than the same home in Lawrence. She posits that this is because the schools are better in Methuen, because Methuen is not as populated as Lawrence, and because car insurance is less in Methuen.

The developers of two case study projects, Boston Machine Lofts in Lynn and Bayley Street Lofts in Pawtucket, Rhode Island, faced a similar dilemma when making pricing projections. Each came up with a different solution. Although both these projects are condos, similar methods can be used for deriving rental pricing. After these two case studies are introduced, the methodology for deriving the Lawrence rental and price projections will be explained.

Approach I. Deriving Prices from Boston and Other Loft Projects - Boston Machine Lofts, Lynn.



Boston Machine Lofts is 30 unit condo conversion in Lynn.

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⁵⁰ RCG, Boston Machine Lofts Website, <u>www.bostonmachinelofts.com</u>, 2004

The Boston Machine Lofts, a former industrial building in downtown Lynn, was redeveloped by the Resource Capital Group, a Cambridge development and property management firm. They completed the project, in June 2004, opening the doors to 30 loft-style units.

RCG chose to look at the greater Boston area market to determine their price range for the Boston Machine Lofts. Because their target market was Boston residents instead of Lynn residents, they priced the units relative to Boston pricing. In Boston, comparable units were selling for \$500 per square foot. Units in this building were priced at half that amount. Henri-Claude Bailly, principal at RCG, identifies the project's main competition as other loft projects in the Boston area, not other projects in Lynn. Because there was no local comparables, in the end, they chose to experiment with the pricing to see what would work.⁵¹

On retrospective, it seems that RCG was right on target with their pricing assumptions. All units were presold before construction was even complete. Their initial prices were actually below what the market was willing to spend. The firm increased prices four times between when they sold their first unit to when they sold their last unit. The first condos sold for less than \$200 per square foot. The last units were sold for approximately 10% higher. Graphs of the listed prices are included in the Market Analysis Appendix. As can be seen in the graphs, the average unit price of the units was \$213,838, while their median price was \$199,400, and the average price per square foot was \$190.

Although no one likes to pay more than other buyers, Bailly says that increasing prices over time gave the project a sort of momentum and gave early buyers confidence with their purchase. At the final prices, Bailly believes they could have easily sold another 10 units.

Originally, local real estate brokers projected that buyers would never be willing to pay over \$150 per square foot. Bailly attributes part of the reason why they were able to achieve historically high prices in Lynn, much higher than local brokers said was possible, was because the target market was not Lynn residents. Of the thirty units sold, twenty-nine were to non-Lynn residents. People purchasing units lived and worked in Boston.

⁵¹ Bailly, Henri-Claude. Principal, Resource Capital Group. Interview, June 2004

Approach II. Deriving Prices from Surrounding Communities – Bayley Street Lofts, Pawtucket





The Bayley Street Lofts is a 25 unit artist live/work project under construction in Pawtucket, RI.

The developers of the Bayley Street Lofts in Pawtucket followed a slightly different approach. It involved looking at both the local comps and comps in surrounding communities.

Bayley Street Lofts mill is located adjacent to downtown Pawtucket. Peter Gill Case, one of the project's developers, calls the area a "frontier. Nothing is happening. Next door is a welfare office." But, he and his partner saw the area as an opportunity. A strong artist movement is taking place in the city and other developers are making their mark. He and his partner bought their 40,000 square foot mill from the city of Pawtucket for \$1. Construction of 25 artist live/work units is currently underway.

Like Lawrence, Pawtucket has only one other mill conversion comparable project. This mill was converted into condos in the late 1980s, before the market crashed. Today, these condos are reselling for twice their original price. The developers, 7 Stone Building Group, Inc., also looked at other condos in Pawtucket. For what they could not find, they looked at Providence and extrapolated from there.⁵³

In the end, to compensate for some of the uncertainty of the prices, the developer's strategy was to aim low on the sales prices, at least in their proformas. If their finances

⁵² Bayley Street Lofts, 7 Stone.com, 2004

⁵³ Gill Case, Peter. President of Truth Box Architects and Seven Stone Building Group Inc. Interview, July 2004

could work even with sales prices 50-70% below the comparable projects they had found, they knew the project would work. However, Gill Case said this proved to be tougher than he thought, because costs associated with development did not always work at low prices.

Unlike the Boston Machine Lofts, this project is still under construction and 7 out of the 25 units have been sold and another 7 have been reserved. The average list price per square foot of the project is \$166 and the average sales price is \$215,205. Listed prices are included in the Market Analysis Appendix.

With these methods in mind, let's take a closer look at Lawrence's rental and condo market.

Rent Projections

The raw data that informs rental projections includes rental pricing from Museum Place, Lawrence's only residential mill conversion; rents from three of Lawrence's highest end apartment buildings; and rents from mill conversions or other historic building conversions in Lowell. Rental information was derived from speaking to property managers directly and examining at on-line rental listings for these buildings. Detailed data on these sources are provided in the Market Analysis Appendix.

What's for Rent in Lawrence

The only residential mill conversion in Lawrence is the 11 story Museum Square, owned by the Boston Land Company. This building was converted during the last housing boom and opened its doors in 1989. The building has approximately 400 residents, with 79 one bedroom units and 97 two bedroom units. Of these units, 130 are market rate and 46 are subsidized (residents receive section eight).⁵⁴



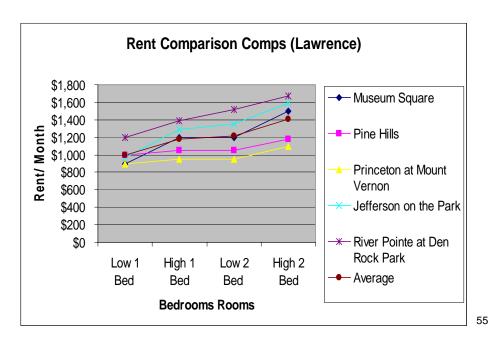
Museum Square is the only residential mill conversion project in Lawrence.

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 $^{^{54}}$ Torres, William. Property Manager, Museum Square. Interview, June 2004

Museum Square has a number of amenities including an outdoor pool on the roof; a fitness center; storage areas for individual units; a recreation room with a tennis court and golf range; and a children's room. Most amenities are located on the interior of the building, because the floor plate is too deep for residential units in that area. The building also has laundry. It does not have security, but it does have a 24 hour concierge service, which makes people feel more comfortable.

One bedroom market rate units in this building range from \$900 to \$1200 and two bedrooms range from \$1200 to \$1500. Higher rents are charged for units on the upper floors with the best views. Rent includes heat, hot water, and central air conditioning. Residents pay \$30 per month for parking in the adjacent four story lot.

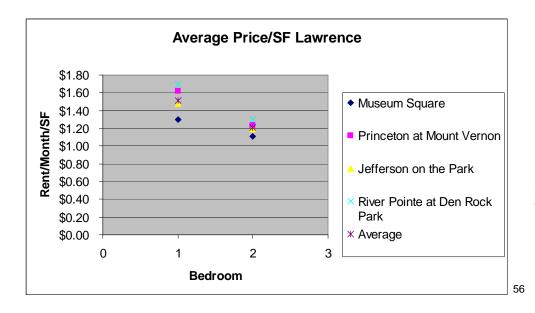


Graph 1. Each apartment complex in Lawrence has a range of rents it charges for one bedroom apartments and a range of rents it charges for two bedroom apartments. These ranges depend on the quality and size of the unit. The low 1 bed shows the lowest rents for each building for a one bedroom apartment and the high 1 bed shows the highest rents each building is charging for a one bedroom apartment.

William Torres, the property manager, observes that Jefferson on the Park and Riverpoint at Denrock are the building's greatest competitors. They offer similar amenities to Museum Square, however these buildings are on the Andover border and often advertise themselves as part of Andover, even though they are legally in Lawrence. As a result, their rents tend to be higher than Museum Square. Graph 1 shows the rents per month of Museum Square in comparison to other apartment complexes in Lawrence. Graph 2 shows the average rent per square foot of space for the same apartment complexes.

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⁵⁵ Torres, William. Property Manager, Museum Square. Interview, June 2004; Property managers at Princeton at Mount Vernon, Jefferson on the Park, River Pointe at Den Rock Park, Inquiry phone calls, July 2004



Graph 2.
Average rent
per square foot,
organized by
number of
bedrooms in
each
apartment.

Justification for Rent Projections

These data were used to inform price projections. Given the barriers to development in Lawrence and the possibility of a bubble, a conservative approach to pricing was taken. It should also be noted that Museum Square, the only mill conversion in Lawrence, has the lowest average price per square foot rent that any other apartment complex in Lawrence. This is likely, because Museum Square tends to have larger units and because the other complexes are close to Andover (which has much higher rents than Lawrence), and often market themselves as Andover rental units. As a result, rents of the new conversions will probably be closer to the Museum Square rents, than to rents at other complexes.

With this said, rental projections were made by looking closely at average rents in Lawrence and keeping rental projections around the trend line of Lawrence's four highest quality rental complexes. Following this approach, rental projections range between \$1.20 to \$1.45 per square foot for units a 950 square feet or smaller, and between \$1.10 to \$1.20 for units in the range of 950 square feet to 1200 square feet.

Lawrence rent projections tend to be approximately ten cents lower a square foot than rents in Lowell. This is a good check and indicates that projections seem reasonable, given that Lowell is likely to be Lawrence's biggest competitor. Unless units are slightly less expensive in Lawrence, many potential tenants will move to Lowell, because it has more amenities and many well established mill conversion projects.

⁵⁶ Torres, William. Property Manager, Museum Square. Interview, June 2004; Property managers at Princeton at Mount Vernon, Jefferson on the Park, River Pointe at Den Rock Park, Inquiry phone calls, July 2004

Condo Price Projections

The raw data that informs condo projections includes MLS listed condo prices in Lawrence in June 2004; actual sales prices for Lawrence from Spring 2004⁵⁷; and listed and actual sales prices of comparable projects in communities including Lynn, Lowell, Pawtucket, and Brockton. Detailed data on some of these sources are provided in the Market Analysis Appendix.

What's For Sale In Lawrence

The City of Lawrence does not have any mill structures with condominium units. However, as of June 22, 2004 there were 90 single family homes, 83 multifamily homes, and 37 condos on the market in Lawrence.⁵⁸ Typical condominium units are located in older homes or apartment complexes.⁵⁹ Jennelle Graziano estimates the average sales time for a condominium in Lawrence is 60 days.



Graph 3. Number of units on the market in June 2004 at various unit prices.

Graph 3 shows the number of condo units on the market at various price points, as of June 2004. Most of these units are 2 bedroom units. It should be noted that this data is from the multiple sales listings, meaning that these are the units' listed prices. However, these data are very consistent with actual sales prices, with the exception that condo units almost as a rule are never sold for more than \$190,000 in Lawrence. Similarly, Graph 4 shows the various units on the market by price per square foot. Again, the spread follows the actual sales price data, with the exception that the upper limit for sales price tends to be \$200 per square foot.

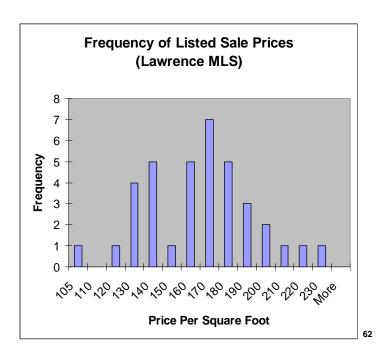
⁵⁷ To respect the confidentiality of the source for this data, the EdgeGroup, no actual sales data will be provided in this report. Instead, actual sales data is only used to gauge the accuracy of MLS listed sales prices.

⁵⁸ Multiple Sales Listings, Jennelle Graziano, Coco, Early and Associates. Interview, June 2004

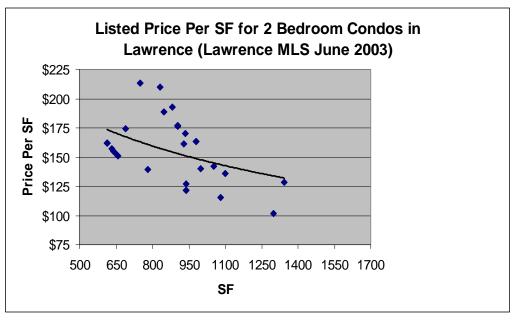
⁵⁹ Graziano, Jennelle. Realtor, Coco, Early and Associates. Interview, June 2004

⁶⁰ Multiple Sales Listings, Jennelle Graziano, Coco, Early and Associates. Interview, June 2004

⁶¹ Faust, Fred. President, EdgeGroup Inc. Interview, June 2004



Graph 4.
Number of units
on the market in
June 2004 at
various square
foot prices.



Graph 5.
Average listed price per square foot for two bedroom condos in Lawrence.

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Graph 5 shows that the average listed price per square foot declines as units increase in size. The actual sales price data for condos is very similar. However that data is much tighter around the trend line. Based on this data, it seems that only the very smallest units could possibly achieve the \$200 per square foot price in Lawrence, whereas a larger 1200 square foot unit would never exceed \$130 per square foot.

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 $^{^{62}}$ Multiple Sales Listings, Jennelle Graziano, Coco, Early and Associates. Interview, June 2004 63 ISIP

Justification for Price Projections

Current condo prices in Lawrence form the basis for projected prices. Adhering to a conservative pricing philosophy, final condo projections range from between 5 and 10% below the top of the market in Lawrence to just below the average current prices for condos in Lawrence. Projections are as followed: \$165 to \$188 per square foot for an 800 square foot unit; \$160 to \$178 per square foot for a 950 square foot unit; and \$143 to \$160 per square foot for an 1100 square foot unit.

These prices fall under the average prices for comparable conversion projects in other third tier cities including Lowell, Lynn, and Brockton, shown in Table 1. Lower prices in Lawrence seem reasonable, because they will provide buyers an incentive to choose Lawrence instead of another city. For example, although Lynn had an untested conversion market prior to the Boston Machine Lofts, its prices will be higher than Lawrence because it is closer to Boston. Lowell should also have higher prices, because although it is just as close to Boston as Lawrence is, Lowell has more restaurants, outdoor cafés, and entertainment, as well as an established conversion market, and a National Park within its bounds.

Comparible Condo Mill Conversions							
	Unit Size Pr	rice/SF F	Price				
Boston Machine Loft							
Average	1,134	\$191	\$213,833				
Median	1,045	\$190	\$199,400				
Max	1,525	\$232	\$302,900				
Min	804	\$161	\$157,900				
Bayley Street Lofts							
Average	1,317	\$166	\$215,205				
Median	2,180	\$173	\$377,900				
Max	2,180	\$186	\$377,900				
Min	825	\$145	\$149,000				
Lowell Middle Street							
Average	892	\$185	\$166,571				
Median	841	\$190	\$159,400				
Max	1144	\$211	\$239,900				
Min	750	\$159	\$121,819				
Etonic Lofts, Brockton							
Average	944	\$237	\$221,887				
Median	938	\$235	\$219,900				
Max	1111	\$287	\$259,900				
Min	836	\$189	\$199,900				

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⁶⁴ RCG, Boston Machine Lofts Website, www.bostonmachinelofts.com, 2004. Faust, Fred. President, EdgeGroup Inc. Interview, June 2004; Gill Case, Peter. President of Truth Box Architects and Seven Stone Building Group Inc. Interview, July 2004; Etonic Lofts Website, www.etoniclofts.com, 2004

The Possibility for an Upside

Prices and rent projections given in this chapter are conservative. Condo or rental conversions in Lawrence's mill district will be a completely new product in the Lawrence housing market. They will be newer than other units on the market and will likely have a better design. They could also attract residents from outside of Lawrence, which in the Boston Machine Lofts project allowed the developer to reach historically high prices for the area. As a result, if done well with good design and amenities, condos could achieve a higher price per square foot than the \$200/SF or \$190,000 SF ceiling that seems to exist in city.

However at the same time, it still seems wise for conservative pricing to be used when creating feasibility analyses for Lawrence mill conversions, especially for the first few projects. Prices in Lawrence should not be higher than prices in Lowell or another surrounding community, because people need more of an incentive to buy Lawrence. The market is untested and Lawrence does not have as many amenities as Lowell. Fred Faust, President of the Edge Group, a real estate consulting firm and broker, agrees that a discount factor has to be used in these new markets to entice residents. This discount factor should account for the extra risk that buyers assume because resale value is unknown. "They need to be convinced that there will be success over the long term."

The other benefit of using conservative pricing is that if the project still works at these prices, it will likely work no matter what happens with the market. As Michael Mullins from the Mullins Company says, "You can always build in a supply constrained market using conservative underwriting." If people are already buying at these prices in Lawrence and the surrounding communities, it seems unlikely that they would not buy in a unit at these prices in a new mill conversion. Prices can always be increased once sales begin, as seen in the Boston Machine Lofts project. It is much harder to decrease prices when the doors open, because the proformas are based on higher projected sales prices and the project just will not work from a financial perspective.

Finally lower prices also take into account the real possibility that eastern Massachusetts is in a bubble. Based on the discussion in Chapter IV, if eastern Massachusetts is in a housing bubble, prices in Lawrence could fall between 5 to 20%. If this occurs, today's condo prices and rents will likely not be achievable in Lawrence. As a result, no growth is assumed in the condo pricing projections. Prices are also on the conservative side and do not attempt to exceed current pricing and rent caps.

Condos versus Rental

Thus far we have discussed pricing and rents, however we have not discussed ownership – whether the market demands condos or rentals.

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 $^{^{65}}$ Faust, Fred. President, Edge Group Inc. Interview, June 2004 $\,$

Currently the demand for condos in the Boston region is somewhat stronger than the demand for rental housing, because of interest rates. However, Tod McGrath, President of AdvisoRE, LLC and Lecturer at MIT's Center for Real Estate, believes that the market for rental housing is more defined in Lawrence, and as a result, more likely to succeed in a mill conversion project. Because the condo market is less tested, it is inherently more of a risk. He says that any market, whether it is Lawrence or Boston for that matter, can only absorb a limited number of owner occupied units. If a project has many units, it can be more difficult to sell the units in a reasonable enough time to make the project work from a financial perspective. Rentals are generally easier for the market to absorb. Developers can also be more flexible with lowering their rents, because they are not stuck with low rents for the long term. If the market proves better the following year, the landlord can always increase the rents then.

As will be described in the financing chapter, the answer to whether developers should go with rental versus condos also comes down to how the project is financed. Consequently, certain subsidies like tax credits require that the project be a rental. Thus, the question of rental housing versus condo housing will likely come down to whether or not the developer needs to use tax credits to make the deal work.

It should be acknowledged that in addition to being different from a financial perspective, condo projects and rental projects physically require different designs and finishes. For example, if the building is a rental, an open loft style layout without walls and with few finishes, would be difficult to market, whereas it may be a more desirable from a condo perspective. Renters would be less interested in this type of unit because they would not be able to finish the unit themselves, as would an owner.

Condo projects on the other hand require some additional equipment. For example, condos generally have individual heating and cooling systems with each unit. This may not be required for apartments. Cohousing projects, one of the market niches, also work better with a condo project. As will be described in the Cohousing Appendix, from a legal perspective, it is important for cohousers to own their own units.

The Question of Absorption

To successfully convert mills in Lawrence into housing requires both an understanding of the target clientele and the creation of a product that meets their needs. However, it should be noted that the demand for housing is not unlimited. The question of market absorption, or how much housing can be filled at one time, is an important question. As discussed, rental housing tends to be a better hedge than condos in terms of absorption. Rental units generally fill up faster than condos, and developers can more easily lower rents in a given year, than lower condo prices, which are a one time deal.

It should be noted that as of June 2004, only 34 condos were on the market in Lawrence. If 100 new condos were added to the market tomorrow due to a mill conversion, prices for all condos in Lawrence could go down. This is because, if the same number of people were seeking condos, after the number of condos to choose

from increased significantly, buyers would be in a better position to negotiate. They would have more options and the average sales period (which is today 60 days) would likely increase for all condos. As a result, prices could decline.

However, the question of absorption may not be as much of a problem, if a mix of rentals and condos come on the market or if a new residential product is created. For example, a loft style unit may bring a completely different buyer or renter to Lawrence. This person may be from another city or may even be someone from Lawrence, who up until this point did not consider buying a condo or renting, because the options in Lawrence were so poor. If this is a case, other condos and rental units would not even compete with units currently on the market in Lawrence, and projected prices and rents could be achieved or even exceeded. Thus, building housing that creates a solid demand in the mill district, as will be described in the next chapter, could provide some added protection against absorption problems.

Conclusions

Taking into consideration the various arguments for condos versus rentals, as well as identifying the absorption issue, it can be concluded that rental projects will likely be the most viable for the first few housing projects in Lawrence. The rental market is better proven in Lawrence; moreover rentals offer additional subsidies, which can increase the financial viability of conversions; and rentals will likely be more easily absorbed.

However, condo projects should not be ruled out, if developers are able to figure out creative ways to finance these projects or if buyers can be lined up prior to development, as they may be in a cohousing project (discussed further in Chapter VI and the Cohousing appendix). Condo projects will also become more viable, as conversions begin to happen in Lawrence, which both test and change the market. With activity generated from other conversions, potential buyers may be more eager and feel more confident to invest in the mill district.

VI. Market Niches – The Tenant and Owner Profile

Key Concepts and Conclusions

Marketing efforts should be directed to two potential target niches - people seeking affordable housing and cultural creatives, who more specifically may be seeking artist live/work space, cohousing, and/ or green building. If a participatory planning and design approach is followed, a product could be created that meets the interests of all these groups.

Creating such a product and marketing to these target audiences will help ensure a strong demand for housing in the mill district. This demand will create an environment in which prices projected in Chapter V can be achieved and even exceeded. Marketing to these groups could also begin to break down the Why Lawrence Barrier? (Chapter III) If the mill district can market itself as an exciting artist community with other attributes such as cohousing and green buildings, it could distinguish itself regionally. Marketing to cultural creatives could also have community advantages. Studies show that artists create a 'buzz' that can generate major economic benefits in a community. Additionally, cultural creatives as a group tend to become more socially and financially invested in where they live. Combined with affordable housing for current residents, generating this type of housing could in the long term, create a major turnaround in Lawrence and build an initiative that helps the city emerge as a regional cultural center.

Current zoning in Lawrence requires that all new residential projects designate at least 10% of their units as affordable housing, a major benefit to current residents. From a developer's perspective, affordable housing may also be required to make mill conversions in Lawrence viable. Because demand for affordable housing is solid, affordable housing will virtually guarantee that a certain number of units will be filled. Thus, affordable housing could buffer against problems associated with absorption. Furthermore, as described in Chapter VII, subsidies offered for projects with an affordable component may also be necessary to make these projects financially feasible.

The other three market niches fall under the marketing term, *cultural creatives*. Cultural creatives tend to be creative individuals with a strong social and environmental agenda. They are often described as "urban pioneers," who are willing to live in communities that others with similar levels of education and income will not seek out. In terms of housing desires, as a marketing category, cultural creatives tend to prefer renovated historic buildings with eclectic designs situated in creative diverse communities with easy access to nature, walking, and biking paths. If various attributes of Lawrence and the mill district are emphasized, the mill district could aptly fit this description. Based also on descriptions of residents from mill projects in other third tier cities, cultural creatives will likely be the population most eager to live in Lawrence's mill district.

The following three types of cultural creatives – artists, cohousers, and green consumers - have been identified as having the strongest demand for housing in Lawrence, while bringing the greatest good to the community. The decision to focus on these three groups were made based on 1) conversations with people from Lawrence; 2) profiles of residents from mill conversion projects in other cities; 3) interests identified at a housing meeting held for the Duck Mill in March 2004; 4) cohousing efforts already underway in Lawrence; 5) results from a survey administered to potential residents that indicates an interest in artist space, cohousing, and green building; 6) the thriving artist community, which already exists in Lawrence and the potential for its growth; and 7) the concern that high operating costs after renovation may limit redevelopment.

Two Schools of Thought - Who Will Live in the Mills

As demonstrated by the Boston Machine Lofts example from the previous chapter, pricing is integrally linked to the resident profile (i.e., who will live in the mill). Who the client will be informs what the product should be and determines the price that can be achieved.

Residents from Outside Lawrence. At the Boston Machine Lofts, of the 30 units sold, only one was purchased by a current resident of Lynn and only one was purchased by an investor. This buyer bought two units. One for himself and one which he sold for a profit. None of the buyers have children. Approximately half are married and one-third are gay couples. Henri-Claude Bailly, the developer, classifies these buyers as "urban pioneers." Families with children were likely apprehensive about the project because of Lynn's reputation for having poor schools. Instead, he feels that buyers are looking for a more "edgy urban environment."

There seems to be some support that Lawrence's mill district residents will also come from cities outside of Lawrence. For example, Jennelle Graziano says that, "My office gets calls every day from people wanting to move from Boston." William Torres also says that over the last couple of years, he has seen more and more residents of Museum Square coming from Boston. A survey administered to potential residents attending cohousing meetings in Lawrence also shows that all but one of these households were from other cities.

Residents from Within Lawrence. In contrast, Peter Gill Case from the 25 unit Bayley Street Lofts has been surprised at the lack of buyers from outside Pawtucket. Currently the project has 14 reserved units, of which seven are under sales agreement. All of the seven subsidized HOME units sold immediately. All units have been reserved by people either from Pawtucket or Providence, with the most being from Pawtucket. Gill Case said, "I was shocked about this." He had expected more people from the "outside," from places like Boston or other communities. Additionally, although the project is marketed as an artist live work space, only 5 out of the 14 are reservations have been made by artists.

Kristen Harol from Lawrence CommunityWorks believes that like the Pawtucket project, there are people right in Lawrence who would like to move into the mills, especially if the project has an affordability component. However, Jennelle Graziano wonders whether the Latino population will want to live in the mills, because it is not something they are used to. She says families have a clear idea of what a house should look like and it is not a mill. Marianne Paley believes that single professionals working in Lawrence at places like 60 Island Street would find the mills a highly desirable place to live.

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⁶⁶ Torres, William. Property Manager, Museum Square. Interview, June 2004

⁶⁷ The results of the cohousing survey are included in the Cohousing Appendix.

A Closer Look at the Potential Market

To take a first step at evaluating the demand for mill housing in Lawrence, in March 2004, the Sidells with assistance from Chris Scott Hanson, a cohousing expert, ⁶⁸ held a public meeting advertising the potential for new housing in the Duck Mill. It was publicized both locally and in alternative media sources, such as National Public Radio. Advertisements noted the possibility that Duck Mill could be converted into an ecovillage or cohousing community as well.

The meeting was held at Cambridge College in the Sidells' 60 Island Street building. The Sidells and Scott Hanson were shocked by the turn out. At this first meeting, over 150 people attended. People spilled out of the main meeting room to the hallway and to an adjacent room. That night there was a buzz in the air about the prospect for living in Duck Mill. Some attended specifically because they wanted to live in a cohousing project. Many attended because they wanted to live in one of Lawrence's mills. Others attended because they wanted to support the revitalization effort.

This meeting and other data informs the selection of two key target markets for housing in the Lawrence mill district – people seeking affordable housing and cultural creatives. The cultural creative category is further broken down into three main groups – people seeking artist live/work space, people seeking cohousing, and people seeking green housing. One person could have just one or all four of these characteristics. Housing that meets these groups' needs could be offered in the same building or in separate buildings. The following will describe why each of the people were identified and why they will likely demand housing in the mill district.

Affordable Housing

Affordable housing will not be discussed here in depth, due to the scope of this paper, the extensive affordable housing research that already exists, the requirement that 20% of the units be designated as affordable in any mill conversion project, and because local advocates in Lawrence will help ensure that high quality affordable housing will be built in the mills. However, before delving into the other three types of market niches that the mill district could fill, it is crucial that the importance of affordable housing in the mill district is not overlooked.

Affordable housing has social and community benefits. However, it can also benefit developers and mill owners on a number of fronts. First, as discussed in the financing chapter, Affordable Housing Tax Credits are available for these projects. These subsidies may be an important part of making the financials of these projects work. Equally important is the demand for affordable housing.

⁶⁸ Cohousing communities, strive to "create an old-fashioned neighborhood in a new way." (Brenton, 2001) They look very similar to a conventional apartment or condo building, but in addition to every household having an individual apartment, the building has some extra common space for social activities. Social activities like group dinners, planning meetings, and social hours, are all part of cohousing communities. More specifics about the cohousing model are discussed later in this chapter and in the Cohousing appendix.

Affordable housing is generally in big demand by families and artists alike. Affordable housing can protect against some of the problems associated with absorption in an untested residential mill conversion market. In other words, if the market demand for a certain amount of housing was overestimated, the demand for affordable units (which is almost always high) helps buffer the project. For example, in the Bayley Street Lofts project, described above, thus far, the only seven units that have been sold upfront (another seven have reservations) of the 25 units in the project, are affordable HOME subsidized units. These units help to stabilize the project, because demand is almost guaranteed.

Cultural Creatives and Their Housing Preferences

The other three market niches (artist live/work space, cohousing and green building) will likely be sought by individuals who fall under the category of cultural creatives. "Cultural creatives" is a marking term used to describe creative individuals with a strong social and environmental agenda. These people tend to have an appreciation for the arts and an eagerness to become actively involved in the community where they live. Cultural creatives are also often described as "urban pioneers," who are willing to live in communities that others with similar levels of education and income won't.⁶⁹

Based on descriptions of residents from mill projects in other third tier cities, cultural creatives will likely be the population most eager to live in Lawrence's mill district. In terms of housing desires, as a marketing category, cultural creatives tend to prefer renovated historic buildings with eclectic designs situated in creative diverse communities with easy access to nature, walking, and biking paths. If various attributes of Lawrence and the mill district are emphasized, the mill district could aptly fit this description. The mills are historic, have interesting and diverse spaces, and are situated in a beautiful environment, adjacent to the Merrimack River and in close proximity to the canals. Considering ways to emphasize these assets should be a priority during the redevelopment process.

Creating a product that this target market desires can distinguish Lawrence regionally, and thus begin to dismantle the *Why Lawrence? Barrier* to development identified in Chapter III. First, this population is the most likely group to move to the mill district, because it meets their tastes. By the same token, because they tend to be interested in social responsibility, as well as take an emotional stake in a community, they are most likely to become committed to the city of Lawrence. If they believe it will have a positive benefit to them and the community, they will be less likely than other populations to be deterred by some of the risk involved in moving to the city. Finally, they are also the group that will likely make the biggest difference in the mill district. Cultural creatives tend to be socially active. They will likely volunteer in Lawrence and become active members of the community. Artists, many of whom fall under this category, also tend to

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⁶⁹ Ray, Paul and Sherry Ruth Anderson. <u>The Cultural Creatives, How 50 Million People Are Changing the World.</u> Three Rivers Press, 2000.

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create a 'buzz' in an area, which has its own long term benefits. Generally once artists move into a neighborhood, outsiders eventually begin to flock to the area, perhaps because of more galleries, music, or events like open studios. More residents tend to want to move in, following the activity and 'hippness' that artists create.

In addition to the reasons for marketing to cultural creatives listed above, all of which were reiterated in the cohousing survey provided in the Cohousing Appendix, the following three groups are singled out as primary targets for mill conversions. The logic for selecting these groups is as follows:

- Artists are selected because the Lawrence artist community is growing and has
 the potential to grow further, as artists are pushed out of more expensive
 communities in the Boston area. Building upon this growth can generate
 demand. Research also shows that emphasizing the arts can result in major
 economic benefits in a community.
- <u>Cohousers</u> were selected because of the interest in cohousing that was demonstrated at the Duck Mill meeting. In addition, from this meeting a core group of families has been meeting monthly to strengthen their relationship and prepare for when the time comes when they can identify a mill to convert into cohousing.⁷¹ Thus, the demand for this type of housing in Lawrence seems particularly real and timely.
- Green consumers were selected because of green building efforts that are already taking place in Lawrence; survey results that show green building is the second most important design feature to cohousers; the mill district's suitability as a green building model due to its historical structures, walkability, and natural resources; and the need to lower energy costs, a big part of the Costly Conversion Barrier (Chapter III).

Descriptions of each of these three types of cultural creatives – artists, cohousers, and green consumers - and their specific preferences will be described below. It should be kept in mind that the needs and preferences of these populations overlap. The same conversion could appeal to all three groups. As a matter of fact one person could be an artist, cohouser, and green consumer. Specific design requirements are included in the Housing Products Design Requirements Appendix and more details about cohousers, including the results of a survey given to cohousers who have been meeting frequently in Lawrence, are included in the Cohousing Appendix. Details on green buildings are provided in the Green Building Appendix.

Artists

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Creating artist live/work space in the mills has the potential not only to support artists that are already abundant in Lawrence, but also contribute to the community from an economic development standpoint. Krystal England explains, "Once ignored by economists, the roles of cultural institutions, creative communities, and artists are

⁷¹ It should be noted that although this core group emerged from the Duck meeting, they have not yet committed to moving into the Duck Mill and continue to seek other possibilities in the mill district.

coming to the forefront of economic development research and discussion. In the late 1980's, the notion that the arts 'actually create wealth' was put forward by the British American Arts Association.... The arts and arts-related activities are no longer seen as accessories to urban life. Rather, these and other cultural elements are seen as businesses and have taken a place in the inventory of elements deemed necessary for a city's economic survival."⁷²



Essex Art Center (left) is a successful center for the arts in Lawrence with a gallery, classes, and studio space.

The Demand for Artist Space in Lawrence

Lawrence has a strong and growing artist community. Many artists have moved to Lawrence from places like Boston and even Lowell, because they are getting priced out of these communities. The fingerprint of artists can be seen when walking through a building like 60 Island Street, which is decorated with paintings and other two dimensional pieces. Next door in a converted mill, Essex Art Center is a successful gallery, displaying local artists on a monthly rotation. It also offers art courses, which are extremely popular. It struggles to meet the demand for the classes it offers for children. The upper floors in this building houses artist studios, as does a portion of the adjacent 60 Island Street and other mills in this district.

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 $^{^{72}}$ England, Krystal. New Space for Living and Working in the Creative Economy. MIT Thesis, 2004

As one artist, Deborah Silke who rents 4200 square feet in a Canal Street mill, explained, "People who haven't had factory studio space can't begin to know how valuable the mill buildings are to the arts...With 14-foot-high ceilings and five bay windows... the voluminous space is an artist's dream."⁷³

"With economic development agencies and city planners increasingly aware of the role of the arts in local economies, artist housing appears to be an essential step in the cultivation and retention of an arts community. There also appears to be a demand for this space within Lawrence and the region. Like Deborah Silke, Jennelle Graziano also agrees that artists seem like a good fit for the mills. Graziano has heard a number of artists at different public meetings expressing an interest in moving into the mills. However, to be a success, artist live/work space needs to be 'affordable and suitable.' Households who filled out the cohousing survey also showed a strong desire to have studio space either in their unit or in common areas⁷⁴

Peter Alexander, an architect currently developing schematic plans for the Duck Mill, has also designed a number of artist live/work spaces, including the Fort Point Channel Artist Lofts in South Boston. He says that artists like as few modifications to the existing mill space as possible. For example, they tend to prefer no finishes, wooden floors, and exposed beams, duct work and sprinklers. At Fort Point, he left amenities at a minimum. The units include only a counter with a sink, a base cabinet, a stove, a refrigerator, a basic bathroom, and hookups for laundry. He says that artists tend to want to do the work themselves, so the developers just make the minimum upgrades to get the certificate of occupancy. In the Fort Channel building they also included a gallery and office space for art groups on the first floor.

In Pawtucket, Peter Gill Case is marketing the Bayley Street Lofts to the artist population. He says that he advertised this space as artist live/work space, because in many other cities, such as Providence, the cost of living is climbing too high for artists. Gill Case believes that pairing affordable units with an artist theme will bring more artists to the community and not only fill his units, but improve the area, because artists stimulate the local economy and bring activity.

Most artist live/work space tends to be similar to the Bayley Street Lofts. It is geared to what Gill Case calls the "light arts" like painting, photography, and jewelry. Because the space is not designed for noise or heavy machinery or equipments, large sculpture or kiln work is prohibitory. He says gearing artist space to these types of artists does not require special facilities. Individual living units look very much the same as normal apartments. The unit sizes of this project are included in the Market Analysis Appendix.

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Lawrence CommunityWorks and MIT Department of Urban Studies and Planning. <u>Reviviendo Gateway Initiative website</u>, <u>www.avencia.com/lcw</u>, 2004.

⁷⁴ England, Krystal. New Space for Living and Working in the Creative Economy. MIT Thesis, 2004

The one exception is the first two floors of his building. The lower two floors of the building are two story townhouses with individual entrances from the outdoors and individual staircases connecting the first and second floor of the unit. One of the reasons why they decided to go with the townhouse style is for efficiency purposes. Gill Case says with every corridor, livable space is lost. The other reason is that some artists may prefer these units as live/work spaces. Their studios could be on the first floor, accessible from the outdoors and even open to the public. Their living space could be on the upper floors. They are still early on in the construction and sales process, but as of yet no one has reserved the townhouses, which are also the building's most expensive units. Gill Case wonders if artists will actually be the ones who purchase these units in the end. In retrospect, he feels that the townhouses may be out of artists' price range. He is still marketing the units and will have to wait to see what happens.

Like Jim Alexander's approach, all of the units in the building have basic finishes. Gill Case thinks that "Artists can deal with raw space easier." Most of the units are open, with rooms defined with limited walls and some doors. Buyers also have to bring their own appliances. Limited finishes help cut costs, which Gill Case explains means less expensive units. The building also retains its original exposed beams and exterior brick walls.

Design requirements for artist live/work units are summarized in the Housing Products Design Requirements Appendix.

Cohousing

Cohousing is another market niche identified in this chapter. Cohousing, like artist live/work space, also has some specific design requirements. Cohousing originated in Denmark in the late 1970s by people trying to create a greater sense of community, while retaining a comfortable level of independence and privacy. It was brought to the US in the 1980s. Today there are approximately 65 completed cohousing communities in the US, with 150 in the planning stages.⁷⁵

As described above, cohousing communities have individual units with some additional common space for social activities. In a mill building, a cohousing community could look very similar to any other condo or apartment conversion. Residents would have their own individual units. However, there would also be some shared activity space, like a common room, kitchen and dining area that are separate from the individual units. Here the social component of cohousing would come into play. Group activities may include a few shared meals a week, planning meetings, parties, and daycare. Generally 30 households would make up one cohousing "neighborhood" and share a common space. This number of households tends to work best for community building and decision making activities.

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⁷⁵ McCamant, Kathryn, <u>Cohousing: a Contemporary Approach to Housing Ourselves</u>, Ten Speed Press, 1994.

In addition to having some shared facilities and an active community life, cohousers are also active in planning in the development period. As is described in the Cohousing Appendix, cohousers take a financial stake in the project before it is built. Therefore, they are active in decision making during the development phase. The cohousers are involved in every decision from how the project is financed to how common space and private dwellings are designed. Legally, because they have money invested in the project and they are not real estate experts, they have a say in every decision and make decisions by consensus. As result, as one cohouser explained, "a sense of community appears long before walls have been built and the legal papers signed."⁷⁶ Once they move in, cohousers are active in management and maintenance.⁷⁷

Once established, cohousing can have social benefits for residents. It can create a strong sense of community and place, which is highly appealing to some people. From a development perspective, once underway it offers close to a sure deal that people will be there to buy the units. Not only have they invested their money, but they have invested two to three years of their lives in the planning process, developing a strong relationship with other members. Thus, the marketing risk is reduced, and no longer just on the shoulders of the developer. Instead, risk is more evenly distributed among all the residents. The availability of equity in these projects could also be appealing to a developer.

However, cohousing, as one coordinator explained, can be difficult from a management perspective. "It is like having 50 business partners who are legally required to agree on everything."⁷⁸ As a result, these projects require developers and participants alike to be extremely patient and true believers in the process and product.

To get a better sense of whom cohousers are and their needs, 15 households were surveyed at a Lawrence meeting, in which 18 households attended. The results of this survey are included in the Cohousing Appendix. Specific design requirements for cohousing projects are also included in the Housing Products Design Requirements Appendix.

Green Building

Green building is the final market niche identified in this chapter. Converting mills in an environmentally friendly way and advertising these green features is one more way Lawrence can appeal to the target market and distinguish itself from other communities. Demand for green building is also demonstrated in the cohousing survey.

Green building features vary according to the building, the site, and what is affordable. To achieve a green building, Chris Shaffner, from Arup Engineer says four goals need to be met.

⁷⁶ Brenton, Maria, We're in Charge: Cohousing Communities of Older People in the Netherlands: Lessons for Britain, Policy Press: the Housing Corporation, 1998.

Hanson, Chris, The Cohousing Handbook: Building a Place for Community, Hartley & Marks Publisher, 1996.

ScottHanson, Kelly. Cohousing Resources, LLC. Interview, April 2004

- 1) Safety and Health. Indoor air quality and other safety considerations are necessary to make a productive place to live and work.
- 2) Resource Efficiency. Energy, water, and the dollar should not be wasted.
- 3) Durable, Long Living, Robust, and Loose Fit. Buildings should be able to last, but be adaptable for the future.
- 4) Maintainable, Flexible, and Adaptable.

People interested in living in green buildings tend to have specific characteristics. Marketing researches have classified them in two categories - true blue-greens and green backs. The Roper Report, a frequently sited marketing study completed in 1996, describes True Blue Greens as being involved in wide range of pro-environmental activities. They are also described as activists and leaders in their communities. They tend to have high socioeconomic status (education, income, and occupational level) and are committed to environmental issues. Green back greens are also concerned about environmental issues. In addition to being committed to these issues, they are often will to pay a premium for green products. Unfortunately the data is inconclusive in terms of how much of a premium these groups are willing to pay for green housing. All cohousing surveys show that households surveyed are willing to pay at least 5-10% more for housing. However, it is questionable once people actually are presented with the bill, if they would truly be willing to pay more.

Appealing to these populations can be one more way for the mill district to distinguish itself from other communities. As one study explained, "Ecological issues are a tie breaker that kicks in when product quality, price and convenience are equivalent. The vast majority of people, if offered credible green products with similar prices and technical performance to conventional products would discriminate in favor of the green product....Let primary benefits win an Oscar as best actor, and let ecological attributes serve in the important capacity of supporting actor." Green building features would also help cut operating costs, a previously identified barrier to development.

Additional information on the green building product requirements is included in the Housing Products Design Requirements Appendix. The Green Building Appendix also offers a few examples of green mill conversions in the region, as well as describes funding sources and specific features that make a building green.

Reaching the Target Market

Once a product and target market is identified, the next step is figuring out how to reach the target audience. Creative solutions to marketing the entire mill district will be discussed in more depth in the conclusion. Here, we will look at an individual project level marketing approach that can be used to reach cultural creatives.

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⁷⁹ Charter, Martin and Michael Polonsky, <u>Greener Marketing</u>. Greenleaf Publishing, 1999

RCG reached their Boston Machine Lofts target market in a number of ways. First, they chose to advertise in nontraditional newspapers, such as the Metro and the Phoenix, instead of the Boston Globe. The Metro also wrote an interest generating article on the project. After the initial paid advertisement, Bailly says much of the advertisement happened through word of mouth, because "People thought they got a good product."

He also attributes the project's success to the fact that RCG created a product that this target population wanted. Although the units have a loft feel, they were sold completely finished with partitions, creating one or two bedrooms. Buyers were also allowed to customize their units at a cost.

To assist with the customization process, RCG created a website that allowed buyers to see what options were available and itemize their costs. This point and click method is very similar to new marketing approaches being followed by firms like Dell computers who allow customers to "build" their own computers. The project website was heavily trafficked. Bailly feels this website added value. Potential buyers got to figure out what they wanted and how much it would cost. This gave buyers a product they desired. It also screened out people who were not serious about purchasing or who could not afford the cost of the unit. Bailly says that of the people who contacted them, approximately 50% signed a reservation agreement. Of those that signed the reservation agreement approximately two-thirds signed a purchase and sales agreement.

Creative approaches like these need to be adopted at the individual building level to reach target audiences in Lawrence's untested mill conversion market.

Conclusions

All of these market niches can fit well into the mill district. The buildings are beautiful and historic. They are nestled on or near an island. The mill district appeals to artists, cohousers, and green consumers alike. Determining how to balance the interests of these different populations and create a product that targets the cultural creative market will help facilitate a strong demand for housing in the mill district. Emphasizing market niches will also help distinguish Lawrence from other communities, thus decreasing the effects of the *Why Lawrence? Barrier*.

Approaches of how to market Lawrence's mill district as an area where cultural creatives will want to live, will be discussed more in the conclusion. However, another major challenge to implement this vision is to figure out how buildings can be designed to appeal to both cultural creatives and those seeking affordable housing. Part of this challenge can be solved by involving future residents in the design of individual buildings, to help ensure that the needs of all parties are represented. Participatory design and planning approaches will be discussed further in the conclusion.

Chapter VII Deal Structure

** <u>Mill owners</u> are strongly encouraged to <u>take a close look at this entire chapter</u>, especially if they are in the process of determining what to do with their mill. **

Key Concepts and Conclusions

First and foremost, I would like to **caution owners who want to convert their mills into housing on their own.** The margin between costs and achievable projected prices and rents in Lawrence is extremely slim. An experienced developer should be involved in some capacity to prevent delays and maximize the value of the conversion project to the mill owner, to the community, and to future residents. With that said, this chapter describes the various ways mills can be redeveloped and the options mill owners have to lead or participate in that process.

This chapter starts by describing the two basic types of development deal structures, which I will call 1) the <u>equity/loan deal</u>, and 2) the <u>subsidy/loan deal</u>. The major difference between these two deal structures is source of funding. Subsidy/loan deals are almost exclusively associated with rentals, whereas equity/loan deals tend to be associated with condos.

Given that achievable prices and rents are relatively low in Lawrence, but costs of construction are just as high as anywhere else in the Boson region, subsidies will likely be required to make the first few deals work. Thus rental projects will likely be the first mill conversions in Lawrence. However, once the first few projects are opened, and if the market demand proves high for these projects, the equity/loan deal may be as competitive, and more condo projects could be built at this point.

Next, I will describe the four options that current mill owners can take in relation to development, as well as the risks and benefits associated with each option. Options are as follows:

- 1. Hold. Mill owners can continue to hold their mill, and not proceed with redevelopment.
- 2. Sell. Mill owners can sell their mill to experienced developers who will redevelop them.
- Ground Lease. Mill owners can lease their mill to a developer for an extended period of time. The developer will then redevelop the mill on his/her own, without the mill owner's input or participation. The mill owner will get monthly or annual payments for use of the mill.
- 4. <u>Partner</u>. The mill owner could partner with developers to redevelop the mills. The value of the mill at the time when the agreement is made would equal the mill owner's investment in the project. Once the mill is completed, the mill owner will get a return for his or her investment or a proportional portion of the income from operations.

The decision-making chart on the next page shows the options that mill owners may take and associated risks and benefits. It should be noted that these options are not available for all mills. Developers have to be willing to invest. Some mills may be in such poor condition that in today's market, the only practical option that an owner has is to hold. Other mills may be very developable, but developers may only agree to purchase the mill outright and not agree to a partnership arrangement.

Understanding these options and the way deals are structured can be the first step a mill owner takes toward redevelopment. This understanding can be used by mill owners to discover what they want to do with their mill and prepare them to negotiate with developers.

Mill Owners' Options

	Hold	Sell	Ground Lease	Partnership
What This	Mill owners can	Mill owners can	Mill owners can lease	Mill owners can partner
Means	continue to hold their mill, and not proceed with redevelopment.	sell their mill to an experienced developer who will redevelop it.	developer for an extended period of time. The developer will then redevelop the mill, without the mill owner's input or participation. The mill owner will get monthly or annual	proportional share of income from
Mill Owner's Control in Decision Making	Complete control	No control	No control to minimal control	No control to substantial control
Risks and Disadvantages to Mill Owners	the market declines in the future, mill owners may have done	owners are not involved in redevelopment and cannot take advantage of the	receive no payment upfront. The lease locks mill owners into the deal for the long term. Mill owners get minimal, if any control over the mill.	financial investments made. Mill owners

Mill Owners' Options (continued)

	Hold (cont'd)	Sell (cont'd)	Ground Lease (cont'd)	Partnership (cont'd)
Owner	Continued control.	away with a lump sum payment for the mill and assume no risk in the deal.	term cash flow.	Mill owners retain some control of the mill. Mill owners may get a voice in decision making. There is a possibility that mill owners can get more money than just the initial value of mill, if the project goes well.
Who Should Consider This Option	for risk. Mill owners receiving enough income under current use. Mill	low risk tolerance. Mill owners who would like to see their mill redeveloped. Mill owners who are ready to give up	owners who want long term cash flow. Mill owners who do not want to be involved in decision making.	

A Friendly Word of Caution

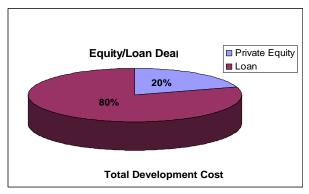
I strongly caution owners who want to convert their mills into housing on their own. As the next chapter will describe, development is a challenge and can be very complicated. It can be even more complex in communities, like Lawrence, that are untested. In these markets especially, the margin between the cost of redevelopment and the achievable price or rents is tight. As a result, even small problems or delays in the development process can have large effects.

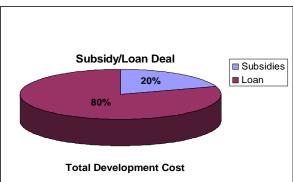
The struggle that can ensue around individuals taking on their first significant development job is exemplified in the Bayley Street Lofts in Pawtucket. The development company is made up of two partners, George Potsidis, a general contractor, and Peter Gill Case, an architect. Both have experience in their fields with adaptive reuse and mill projects, however neither has done a development project of this scale. As Gill Case explained, "Our shtick is that George and I can do it for less," because of a combined knowledge of buildings. However, Gill Case is the first to admit that in reality their effort has had its ups and downs. The major advantage has been that they can do the project faster and ramp up faster. However, at the same time, Gill Case says that "their lack of experience has not cost them cash, but because we're just two people, it can be overwhelming." Surprises and experience have cost them large amounts of personal time and anxiety.

Developers have specific skills, experience, and even political connections, as well as capital. Development requires an architectural vision, an understanding of cost estimation, and experience with contractors and lenders. It also requires substantial upfront costs.

In the following sections, two types of deals that developers may organize are described. These sections begin to demonstrate the complexity of development deals.

Two Basic Types of Deals





Variations on these deal structures include the following:

- •Different ratios of equity or subsidy to loan value. •Some subsidies in the equity/loan deal.
- •Mill owner or cohouser puts in a portion of the equity. •Some private equity in the subsidy/loan deal.

The Equity/Loan Deal

The equity/loan deal is the most simple way to structure a mill conversion project. It acts very similar to how a down payment and loan works when buying or building a house. The developer puts at least 20% equity into the project (similar to a down payment) and receives a loan from a bank for the other 80%. The loan the developer receives during the construction period is called a construction loan. If the project is a condo project, then the loan is often paid off in full to the bank when the units are sold. If the project is a rental project, after completing construction, a second loan, the "permanent" loan, is acquired that pays off the construction loan. The permanent loan is a long term loan that can range up to 30 years, which is paid down by income generated from the project over time.

An example of an equity/loan deal is RCG's Boston Machine Lofts in Lynn. This project occurred over an 18 month period from the time when the property was identified to when the certificate of occupancy was issued. The construction period was 12 months.

Fifty percent of the project was financed with a construction loan from a bank. Fifty percent was financed with in-house equity. In-house money paid for all the predevelopment work, soft costs, and a portion of the construction costs. The construction loan was drawn after construction had been underway for six months. No subsidies were used on this project.

Although RCG had originally approached banks in Lynn to finance the project, none would sign on. The banks didn't believe the prices would be achievable. In the end, a bank from Connecticut issued the construction loan. Bailly believes that this bank was more willing to issue the loan, "Because they didn't understand Lynn as well; they were not scared." Because of the success of the project, RCG was able to repay the loan in four weeks of getting the certificate of occupancy.

A variation on this deal structure occurs when the developer is not the only equity investor. As will be discussed in later sections, other equity investors could include the current mill owner, cohousers, or a pool of investors. Equity investors get a return for their money, just like they would get a return if they put their money in a bank or in the stock market.

Generally investors require a higher return on their money if there is a greater amount of risk associated with the project. Tod McGrath, President of AdvisoRE, LLC and Lecturer at MIT's Center for Real Estate, projects that investors would require a 20% unlevered return on their investment, because mill projects in Lawrence are high risk – the market is untested for residential, making it questionable at what price people would rent or buy units. Mill conversion projects are also inherently more risky than new construction projects, because they can have additional hidden construction costs discovered during the renovation process. If the return is too low on a risky project,

investors would have no incentive to put their money into the project, and would be better off investing somewhere else.

The Subsidy/Loan Deal

The second type of deal structure is the subsidy/loan deal. It works like the equity/loan deal, but the equity part of that deal is replaced with almost all subsidies. It should be noted that the developer generally still invests a substantial amount of equity into the project during the preconstruction period. To use the subsidies, developers have to follow strict standards and regulations of the subsidy issuer.

Subsidy/loan deals tend to hinge on tax credits. There are two types of federal tax credits, both of which are discussed in detail in the Funding Appendix.⁸¹ The first federal tax credit is the Historic Tax Credit. They require that the conversion meets specific historic standards. Historic tax credits are worth almost 20% of the hard construction costs of the project.

The second type of tax credit is the Affordable Housing Tax Credit. They are highly competitive and complex. They require that either 20% of residents are below 50% of state median income or 40% of residents are below 60% state median income. The value of these credits varies from project to project and is generally based on 40% of the cost of the affordable units.⁸²

The historic tax credits require that the owner hold the building for at least five years, while the affordable housing tax credits require a 15 year holding period. Because of the continuous ownership policy, both types of credits preclude condos. As a result, developers using these subsidies must construct rental housing.

Tax credits are not cash. Instead they are just credits that corporations buy from developers to avoid paying an equivalent amount of taxes. For example, if the tax credit is worth \$1,000,000, the corporation who buys it avoids paying \$1,000,000 in taxes.

However, this is where it gets more complex. Without going into too much detail here (more detail is providing in the Funding Appendix), to turn the tax credits into cash that pay for a portion of the development project, the developer actually sells these credits to syndicators who then transfer them to corporations. For every \$1 worth of tax credits, the syndicator may pay the developer between \$0.85 to \$0.95 in cash.

Boott Mill Case Study

The Boott Mill project in Lowell is a good example of a subsidy/loan deal that uses tax credits. WinnDevelopment is in the process of redeveloping the 200,000 square foot mill into 73 one bedroom, 73 two bedroom, and 8 three bedroom rental units. *To respect*

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⁸¹ There are also state tax credits. These are new and will be discussed briefly in the Funding Options Appendix.

⁸²Siergiei, Diane and Rick Lefferts, Commonweal Collaborative. Interview, June 2004

the confidentiality of the developer, fictitious financial data is given. However funding sources are accurate. The fictitious total price of the project is \$35,000,000

The funding sources for the Boott Mill are as follows:

\$18 million construction loan. This loan was issued by Enterprise Bank. It will be taken out by a permanent loan issued by MFHA.

\$5.5 million in historic federal tax credits. This equals 20% of the project's eligible basis, (\$27 million) which includes brick and mortar construction costs, construction loan interest, and soft costs. It does not include the costs of acquisition or the costs associated with permanent loan financing. These credits were purchased by MMA Financial, a syndicator, at \$.90 on the dollar and in the end brought the project approximately \$5 million.

\$9 million of state affordable housing tax credits. These credits were purchased by Eastern Bank for \$.50 on the dollar, which brought the project \$4.5 million.

\$800,000 loan at 3% interest from the City of Lowell HOME funds. Winn does not have to repay this loan until it sells or refinances the property.

\$300,000 City of Lowell lead paint abatement program.

\$980,000 DHCD Housing Stabilization Fund. This is a zero percent loan payable at the sale or refinancing of the property.

\$2.5 million in federal affordable housing tax credits. These credits were purchased by MMA Financial for \$.90 on the dollar, who purchased the tax credits for \$2.25 million.

\$2.5 million from Mass Housing's Priority Development Fund. This is a \$100 million fund which is allocated to close the gap in development deals. It is soft money, which means that it does not need to be repaid until after permanent loan payments are made.

It should also be noted that the developer in tax credit projects surprisingly owns only 1% of the project. Subsidy/loan deals are set up as Limited Partnerships. The General Partner, who in this case in Winn and other investors, only owns 1% of the project. The corporations who bought the tax credits are the Limited Partners and own 99% of the project. This ownership arrangement is consistent with federal accounting standards that allow the General Partner to receive 99% of the cash flow and 1% of the credits, while the Limited Partners can receive 1% of a project's cash flow, but 99% of the credits.

The major variation that exists on the subsidy/loan deal is that the sources of funding can vary depending on the project. The General Partner may also put more equity into the project to account for gaps that exist between the loan amount and the subsidies.

Many different investors can also take part in the deal and participate in the General Partnership and get a portion of the cash flow.

More details about tax credits are provided in the Funding Options Appendix. This appendix also offers information on other funding sources.

Deal Structure Debate - Thoughts on Financing

Developers have different opinions on the benefits of using the equity/loan deal structure versus the subsidy/loan deal structure.

RCG prefers to do all of their projects with in-house equity and without the use of tax credits or other subsidies. They believe that these credits slow down the process and cost money in the end. Without subsidies, RCG feels they are able to create the product that they want at their own pace. Recall that they were able to complete the Boston Machine Loft in just 18 months, from the time when they identified the building to when they were issued their certificate of occupancy.⁸³

On the other hand, the Mullins Company, the developers of the 282 unit Mass Mill in Lowell, see benefit in using the subsidy/loan structure, even though it adds complication. For example, in their next phase, they are using historic tax credits, even though their end goal could always be condos. Because, the historic tax credits mandate that they own the property for at least five years, they are locked into rental units during that period. However, they are building the units with individual equipment, so that they can eventually be turned into condos, if the market is favorable for such units in five or more years.

Joseph Mullins, president, says that part of the challenge of any development project, especially a tax credit project, "is finding a way for a good exit strategy that can be profitable." Tax credits make this somewhat more complicated because they require ownership to be held for a specific period of time, which may lead to conditions that do not necessarily respond to the desires of the market. Also, converting buildings in the future from rental housing to condos is not as easy as it sounds, even if condo-standard systems are in place. Current tenants cannot be moved without paying for their relocation. This can be a substantial cost of any condo project. However, even with these limitations, Mullins feels that tax credits are necessary to make the deal work.

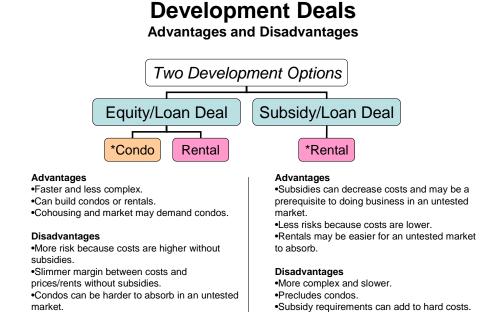
Chris Starr, from WinnDevelopment, believes that each developer "has his own playbook" when it comes to financing choices. Winn sees value in pursuing subsidies. As Starr explains, this approach "is complex and competitive, but it has advantages." Starr is of the opinion that not using subsidies in these markets is riskier and

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 $^{^{\}rm 83}$ Bailly, Henri-Claude. Principal, Resource Capital Group. Interview, June 2004

provides lower returns. He says "the coordinating effort is monumental. But with our way of doing it, it costs money upfront, but if and when we close, we get it all back."

In Lawrence, because of the tight margin between costs and achievable rents and prices, the subsidy/loan deal is likely a must on at least the first few mill conversions. Tom Maxwell, from MMA Financial, a syndicator, has done some work in Lawrence. Maxwell believes that "Deals in Lawrence have to be heavily subsidized. There needs to be a lot of soft debt because prices are low, but costs are high." Tax credits can help make these tight margins work.⁸⁴



Deal Structure Variations

Cohousers

One variation on the equity/loan model would involve cohousers. Under this model, future cohousing residents would act as equity investors for the project, funding a portion of the equity. The equity the individuals invest would act as a down payment for their units. Although this sounds simple, this model can be rather complex. A detailed description of the legal and financial structure associated with this type of model is included in Cohousing Appendix.

Other Funding Sources

A variation of the subsidy/loan model is seen in the Pawtucket project. The developer of this project decided not to use federal historic tax credits. Instead they only used the

⁸⁴ Maxwell, Tom. Principal, MMA Financial, LLC. Interview, June 2004

Rhode Island historic tax credit. Rhode Island state tax credits do not require that the owner hold the property for five years. Thus, condo projects are permitted. The developers had considered the federal credit, however, they decided not to take them. They do not have 'deep pockets' and they could not tie up their money for five years. Instead they wanted their money to be available for other projects within the next two years. Without the state credit, Gill Case says the project would not have worked. He says the credit gave them a return on their investment, whereas without it they would have been breaking even. HOME funding, discussed in the funding appendix, was also used to subsidize the cost of the affordable units.⁸⁵

Although this structure will not work in Massachusetts, because Massachusetts historic tax credits cannot be used for condos,⁸⁶ it does speak to the notion that creative funding approaches can be adopted. A little creativity in the financing period may be the only way to build condos in Lawrence and other third tier cities, where the margin between costs and pricing is tight. Once again, an experienced developer is helpful, because they will know how to make this happen.

Mill Owner Participation

The other variation on both deal structures is for the mill owner to participate in development. Once mill owners begin to understand development options, it is time for them to make a decision about their role in the development process. One of the choices that mill owners need to make is whether or not they want to lose ownership of their mill through sale. Because mills have been in families for a long time or because they generate a steady income stream, some mill owners may be hesitant about giving up their mill for a lump sum amount of money.

Most developers on the other hand will want to buy the mill outright, because from their perspective it makes decision making easier if less parties are involved. The selling option is also the least risky option for the mill owner. By selling, the owner gets cash for the mill upfront. If the owner remains in the deal there is always a chance that the project can fail, and the mill owner could lose everything, including the mill. However the following options may exist for owners willing to take that risk.

Ground Lease

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Under a ground lease scenario, the developer would purchase a 60 to 99 year lease on a mill from the owner. Under the lease agreement, the developer would be responsible for making all improvements to the property and maintaining and managing the project.

⁸⁵ Gill Case, Peter. President of Truth Box Architects and Seven Stone Building Group Inc. Interview, July 2004

⁸⁶ State historic tax credits are new to Massachusetts and tend to receive less cash on the open market. This is because of accounting rules with taxes. Decreasing state taxes means corporations have to pay more federal taxes. This difference is accounted for in the price differential between state and federal tax credits. In Massachusetts, state historic tax credit projects have to be revenue-generating for five years- hence they can't be used for a condo projects. Because state tax credits are so new in Massachusetts, it will be interesting to see how they will be applied in mill projects.

The developer is also responsible for upkeep of the mill. During the lease period, the mill owner gets payments from the lease holder (the developer) for the use of the mill. At the end of the period, the owner gets the mill returned. If the developer defaults on payments, the owner gets the mill back early.

The benefit of this structure is that the mill owner gets long term cash flow. However, the drawback of this structure is that the mill owner does not get the payment for the mill upfront. The ground lease also locks the mill owner into the deal for the long term (although they can sell the ground lease if someone is interested in buying it). The owner also gets minimal, if any control of what happens to the mill during the lease period. The drawback of this structure from the developer's perspective is that as the date gets closer to the end of the lease period, the value of the improvements decline.

<u>Partnership</u>

Mill owners can also become an investor in the project, just like any other equity investor in both an equity/loan deal and a subsidy/loan deal. As was discussed previously, a portion of the cost of a project is often paid for by the developer or investors and the rest can be financed. To become an investor, the mill owner puts his or her mill into the project, as if it were cash. Just like investors who put in cash, once the project is completed, the mill owner will get a return based on the market value of the mill at the point when the deal was established, plus an additional percentage.

For example, in a condo project, once the loans are paid back to the lender and the units are sold, the mill owner could get paid the original value of the mill, plus a fixed cash return anywhere between 5 to 20%. Owners can also negotiate to get a portion of the upside of the project. If the project exceeds projections, owners would not just get their money back and the stated cash return, but they would also get a percentage of the upside of the project. It should be noted that equity investors get paid last, after the debt is paid off. If the project loses money, it comes out of the equity investors' pool.

Hugh Russel, Mass Mills architect, told the story of a creative application of the owner participation model. He explained that he worked with a developer who was trying to acquire a property outside of Boston. The owner wanted a fixed amount for the property and would not budge, even though no developers were able to make the project work at that fixed acquisition price. Finally the developer realized that the mill owner was set on that fixed price, because the mill owner needed that amount of money to pay for all of his grandchildren to go to college. Once the developer learned this, a deal was structured with the mill owner to pay a portion of the cost of the building up front, but keep the owner in the deal, so they would get cash flow over time. This was slightly riskier for the mill owner, because they assumed some of the risk of development. However, in the end it worked well for both parties. Returns turned out to be higher than expected and the mill owner was able to help his grandchildren as they came of college age.

The benefit of the mill owner participation scenario is that the owner could still have a stake in the mill. They could also participate in the upside of the project, if it does extremely well. The downside is that just like any other investor in a project, the mill owner takes on risk. If the project fails, the mill owner could lose a portion of the value of the mill or the mill itself. If that happens, the mill owner would have been much better off to take the payment for the mill upfront and not assume any of the development risk.

The other downside to this arrangement is that developers will often only accept the mill owner as a silent partner. Owners can be frustrated with this arrangement, because it means they cannot provide input into decision making.

Selling

The mill owners interviewed all have a strong interest in the Lawrence community. Each said they would like to see redevelopment that contributes to the community. However, if a mill owner cannot afford the risk associated with development, selling can be a good option to supporting the development process.

One of the concerns that mill owners have, if they do not develop themselves, is that the quality of the project could be reduced. Unfortunately, once a mill is sold it is difficult to guarantee anything. Tod McGrath recommends that when a developer makes an offer on a mill, the mill owner takes a look at other projects the developer has done. The mill owner can also have an architect look at the developer's plans and specifications. It should also be noted, that because developers are experienced, the likelihood that the project will succeed is higher, if the developer takes on the project, regardless of the mill owner's best intentions.

Determining the Acquisition Price

Whether mill owners sell or participate in the deal, at some point the acquisition price or value of the mill needs to be agreed upon by the mill owner and the developer. Any deal comes down to the numbers – hard costs (construction costs) and soft costs (architectural fees, legal fees, environmental testing, developer fees, etc) and the rents or prices that can be achieved when the project is complete. In the following section, I will briefly provide a 'bare bones' description of how the numbers are determined. I have chosen not to include more in depth estimates of the value of various mills, because value can vary considerably from project to project and a back of the envelope approach to determining the value of mills will be inaccurate and misleading.

Oversimplified Method of Deriving the Acquisition Price of a Mill

Value of the Building After Development
- Hard Construction Costs

- Soft Construction Costs (legal fees, architectural fees, developers fee, environmental testing, financing fees and interest, etc.)
 - + Subsidies (tax credits, grants, etc)
 - = Acquisition Price for the Mill

However, with this said, the first step to any development process is determining the value of the mill after it is converted into housing. This value can be derived in a number of ways. If for example, the project is a rental project, a proforma is created that shows the income stream that will be generated over the next 10 years of the project, as well as the costs of management and maintenance. The final value of the mill after construction is dependent on the net operating income of the property, which is the difference between the rent income received and the costs associated with operating the building. Considering the time value of money, each year's net operating income is discounted back to the present, giving the value of the building. In a condo project, the value of the completed building would be simpler to derive and would equal the value of the completed condos on the open market minus any operating costs.

Determining the Value of a Rental Building

To determine the value of a rental building developers project the building's net cash flow for a ten year period, as well as how much income would be generated in year ten if the building was sold (the reversion price). Then the developer discounts the value of the net cash flow to the present. The total value of the building's net cash flow today equals the total value of the building after development. The following shows how net cash flow is derived. The same methodology is used to determine net cash flow for each of the ten years.

Market Rent/Square Foot X Gross Rentable Space

- = Potential Gross Income
- Vacancy Allowance
- Utilities
- Property Taxes
- Insurance
- Management Expenses
- = Net Operating Income
- Tenant Improvements
- Leasing Commissions
- Common Physical Improvements
- = Net Cash Flow from Operations

⁸⁷ The discount rate is a factor used to determine the present value of cash flows expected in the future. It accounts for risk, opportunity cost, and time value of money.

The next step is to determine the costs associated with developing the mill building. Development costs include both hard construction costs and soft development costs. 88 It should be kept in mind that in every mill in Lawrence, the hard numbers will be different. For example, the average cost per square foot for building construction will vary considerably depending on the condition of the building. The cost of construction can also vary depending on finishes. Environmental cleanup costs can also vary considerably from one project to the next.

Generally hard cost projections are narrowed with the help of a construction team during the predevelopment period, which can last anywhere from 6 months to a year or more. During this period, contactors work with the architect and engineer, as they design the project. At various times during this period, the contractor gives estimates for the cost of the work. The final estimate comes in once the design is complete. On average, construction costs will likely range from \$110 to \$160 per square foot net in a Lawrence mill conversion. However, these are rough estimates and should not be used to value the various mills in Lawrence.

The next step involves determining the soft construction costs. Soft construction costs include architectural, legal, lender, and development fees. One of the line items on these proformas is the developer's fee and/or contingency. This item can be anywhere between 5 to 20% of the total cost of the project. Owners may find it unfair that the developer can make so much money on a project. However, owners should keep in mind that the developer's fee is a best case scenario. If the project does not work as projected, for any number of reasons, the developer may not get nearly as much money. If the project completely fails, the developer can lose all the money invested in the project, including the mill itself.

The development fee also compensates the developer for the risk of marketing the project. Developers also have their time in and money invested in the project for a number of years. They invest hundreds of thousands of dollars into the project before its doors even open. They look for a return that compensates them for these financial risks. If the return is low for a risky mill project, then it would make more sense for developers not to put their money and time into that project, and instead do a 'cookie cutter' project that has an almost guaranteed return.

After development costs are determined, developers need to factor in how subsidies may impact their deal. For example tax credits can substantially reduce the development costs. Developers then determine the acquisition price they can afford to pay for the mill. Developers figure out what they can afford to pay after they run their numbers and create their spreadsheets. In the most basic form, the acquisition price is a factor of the project cost (hard and soft costs), the prices or rents that can be achieved, and the required returns. The developer then back solves, and what is left, is

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⁸⁸ Hard construction costs include all the costs associated with physically constructing the building. Soft costs include architectural fees, legal fees, development fees, lender fees, etc.

⁸⁹ These numbers were determined by averaging the construction costs from various projects discussed in this study.

the amount they can pay the owner for the mill. This price will likely be higher if the developer can get more subsidies.

Because of all the factors that go into the development deal, owners should be cautious when determining the value of their mill. They should be careful not to use the prices and hard cost projections in this discussion to do quick math and over or under price the value of their building. Mill owners should seek professional guidance to estimate the value of their mill.

Conclusion

In the second chapter, I discussed the mill owners' dilemma as one of the reasons why redevelopment has been slow in Lawrence's mill district. For the potential of the mill district to be realized, mill owners have to determine what type of deal works for them, whether that is selling or partnering with a developer. Understanding how deals are structured, as well as the risks associated with various options and levels of participation, is the first step to being able to come to the negotiation table and feel comfortable. It is only after these important decisions are made will redevelopment of the mill district proceed for the benefit of the mill owners and community alike.

VIII. Conclusion - The Next Steps

Key Concepts and Conclusions

Mill owners, community development organizations, residents and the local government are in a position to reactivate Lawrence's mill district. Housing is an important component to this process. More housing could help alleviate some of the housing supply constraints and affordability issues that exist in Lawrence for its current residents. Housing could also open the door to a group of new residents who are actively engaged in the community and who could bring vitality and visitors to the mill district. If redevelopment follows the collaborative efforts already established in Lawrence, the benefits could be magnified. In the long-term, this could mean the emergence of Lawrence's mill district as a regional cultural center.

The current regional housing market, paired with indicators of a comeback in Lawrence, make the present period as right a time as any to begin development. However, many barriers to development continue to exist in Lawrence. Development is possible if owners and developers proceed with cautious optimism when planning projects and when making pricing and rent projections. Mill owners also need to act and decide on a strategy for the redevelopment of their mills. Part of this strategy should involve partnering with or selling to a developer. Barriers can also be diminished if the community works together to strategically reduce some of the risks associated with development.

This section outlines key steps that need to be taken to support the redevelopment process. The following table synthesizes how each of these steps can be used to break down specific barriers to development, identified in Chapter III.

Strategies to Eliminate Development Barriers				
Barriers	Solutions			
Mill Owner's Dilemma - Mill owners are not selling their mills to developers nor redeveloping the mills themselves. This is because some owners want to keep the mills in their families, but cannot redevelop the mills themselves, because of the associated risks and costs. Other owners, who own more than one mill, may fear that if they sell one, the value of their other properties may decrease. Furthermore, even if mill owners want to sell and can get over these other two hurdles, they may not accept the offered price, because mill owners tend to overvalue their mills, while developers tend to undervalue the mills.	 Mill owners should initiate the redevelopment process by taking the following steps: 1. Identify their ownership and participation needs. 2. Decide whether or not to hold, sell, form a ground lease arrangement, or partner with a developer. 3. Hire an unbiased third party to evaluate the value of their mill. 4. Negotiate and arrangement with a developer that meets their needs and the needs of the community. 			
Government Barrier – The local government in Lawrence has limited capacity that can seriously delay and handicap development projects. Developers rely on the city as a conduit for local, state, and federal funding. They must also rely on the city for all approvals, permits, and certificates of occupancy. Any delays or mishaps caused by local government can be extremely costly and in the worst case scenario cause a project to default.	 Reduce red tape associated with redevelopment. 1. The city should streamline development processes to support development. 2. The community should put pressure on the local government to improve its practices making Lawrence an easier place to do business. 3. Community development organizations could serve as funding conduits, when possible, to avoid city bureaucracy. 			
Costly Conversion Barrier – Converting mills into housing can be more expensive than a new construction project both in terms of construction costs and operating costs. Some of the factors that make mill conversions especially expensive include: limited parking, inefficient building dimensions, hidden costs discovered once construction is underway, and high operating costs after renovation.	Make collective improvements to the mill district that could facilitate development. 1. The Community could seek funding to build public parking structures in close proximity to the mills. Parking could be built inside obsolete mill buildings that cannot be used for housing or office space. Structures could retain their historic exterior, provide parking, and offer ground floor retail. 2. Seek funding for canal and riverfront improvements and public art. Assist with Green Building Efforts			

Barriers (continued)

Why Lawrence? Barrier – On paper, Lawrence's statistics may make developers and future residents hesitant to invest. Compounded with the fact that the market for mill conversions in Lawrence is virtually untested, investors and future residents will think twice before putting cash and time into mill conversion projects. This is especially true when similar projects exist in so many other cities that may be more desirable because they have tested conversion markets, they are closer to Boston, and/or they have more community amenities.

Solutions (continued)

"Market" the mill district to the region and to potential residents.

- 1. Create a 'buzz' around the cultural life that already exists in Lawrence.
- 2. Emphasize Lawrence's art and multicultural communities.

Support efforts that increase the likelihood that target populations will move to the mill district.

- 1. Support artists through tax incentives and financial incentives.
- 2. Engage prospective residents by inviting them to participate in community events and to volunteer.

Help Lawrence's mill district distinguish itself as a model for green design.

- 1. Create green design recommendations for the mill district.
- 2. Match mill owners and developers with technical assistance and funding sources to implement green measures.
- 3. Emphasize the area's natural resources.

Involve current and future residents in planning and building design to ensure that they will benefit from redevelopment and to solve the design challenges that may exist when attempting to house diverse populations under one roof.

- Ensure that current residents have ownership and rental options in the mill district.
- 2. Hold public forums to facilitate individual building design.
- 3. Consider how nonprofit organizations could be equity partners in redevelopment deals.

The First Step Towards Redevelopment – The Mill Owner's Role

To start the redevelopment process, mill owners need to take the leading steps. Some of these steps have already been made by building owners like the Sidells and Paleys who have started to renovate their mills for office and art space, and Bob Ansin who has recently purchased the Wood Mill and plans to redevelop it as a mixed use space. However, more mill owners need to follow suit, if the entire district is to reap the benefits of redevelopment. Nonprofit organizations and the local government also need to help owners through this process.

The first step mill owners need to take is to identify their needs. They should decide how to approach the conversion of their mill, whether to sell or try to collaborate with a developer. The preceding chapters provided mill owners with a better understanding of the development process, as well as options and associated risks. This understanding should help mill owners go to the negotiation table more informed and more ready to come to an agreement that meets their needs and the needs of the community.

Community Support for Redevelopment

Regardless of how mill owners decide to proceed, they and their development partners will struggle more if they try to redevelop their mills alone. As described in earlier chapters, because Lawrence's mill district is an untested residential market, it is a relatively risky place in which to do business. To address some of the other barriers to redevelopment, local coalitions need to implement key strategies to decrease the risks associated with development.

Fortunately, one of Lawrence's greatest strengths is its precedent for collaborative action. Coalitions like the Reviviendo Gateway Initiative, which are already working hard to improve the mill district, are well established. If these groups continue to do what they are doing and further emphasize the following key strategies, they can drastically improve the likelihood that redevelopment of the mill district will succeed. From this point forward, collective action of mill owners, community development organizations, local residents, local government officials, and developers will be called the "Community."

The following strategies are key:

- 1. "Market" the mill district to the region and to potential residents.
- 2. Reduce red tape associated with redevelopment.
- 3. Support efforts that increase the likelihood that the target market will move to the mill district.
- 4. Seek funding for collective improvements for the mill district that could facilitate development, such as public structured parking, canal and riverfront improvements and public art.

5. Involve current residents in planning and individual building design to ensure that they will benefit and to solve the design challenge that may exist when attempting to house diverse populations under one roof.

These strategies are further described in the following sections.

Strategy 1. 'Market' the mill district to the region and to potential residents. One of the most important initiatives the Community can do to help with the redevelopment effort is to systematically 'market' the mill district. This group approach to marketing can increase the likelihood that residents will buy or rent units when mill conversions open their doors. This will reduce the risks associated with the *Why Lawrence? Barrier*. If the entire mill district is marketed, the mill district will begin to differentiate itself from other communities that may be closer to Boston or have more amenities. This action takes the responsibility and risk off a single owner or developer trying to attract new residents to a project. It also improves the likelihood that many mill conversion projects will succeed instead of just a few. Additionally, marketing gives the community an opportunity to create the vision and destiny for the mill district. Plus, it can be just plain fun for everyone involved.

As discussed, key target groups include both people seeking affordable housing and cultural creatives. Marketing to these groups can start today, before the first hammer is raised. In many ways, marketing has already begun with grassroots efforts discussed in earlier chapters. The goal of pre-marketing should be to **create a buzz around the cultural life that already exists in Lawrence** from its thriving Latino culture to its active arts community.

For example, given that the arts spur economic development and attract visitors and residents to a community, one approach to pre-marketing would be to further **emphasize the arts that are already in Lawrence**. Community members should try to build upon the success of the Essex Art Center and Lawrence Open Studios, by hosting other arts-related festivals, artist competitions, and events that are advertised throughout the region. Mill owners in collaboration with nonprofit organizations could also consider holding a major arts walk. During this event, a portion of each mill could be converted into gallery space and performing arts space. Such an event would get people to walk in the mill district and engender excitement and familiarity with the mills. It would also entice visitors to take part and enhance in the potential of the community and the arts movement.

When advertising art events, creating a logo and an image for the Lawrence art's scene may be a sound idea. Already the Lawrence Cultural Alliance has developed a logo. The city is also working with Visual Republique, a marketing/ ad agency, to develop a marketing brochure. Expanding these efforts with a tag line, such as something to the order of 'Real artists, in a real city,' could **emphasize the fact that cutting edge art is emerging in a place like Lawrence**, because artists are relocating there as regional

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 $^{^{90}}$ Super, Maggie. Groundwork Lawrence. June 2004

prices increase. Distinguishing the Lawrence arts movement in this way may bring visitors, as well as other artists who are looking for affordable space to live and work, as well as an 'edgy' urban art environment.

<u>Strategy 2.</u> Reduce red tape associated with redevelopment. The Community must put pressure on the local government to improve its practices to make Lawrence an easy place to do business. The **city itself must streamline development processes and support development**. As discussed in the barrier section, if the city slows down the development process it can cost the project financially and potentially make the project fail completely.

However, cities can do a great deal to support development. In Lynn for example, the mayor specifically told the Boston Machine Lofts developer to contact her directly if they experience any unnecessary red tape along the way. As a result, RCG was able to make appointments with inspectors and other officials for the next day or two, instead of six weeks later.⁹¹

The Community can also do what it can to speed up city processes. For example, local **community development organizations could serve as a funding conduit**, where possible to avoid city bureaucracy. They can also put pressure on the city and provide support where necessary.

Strategy 3. Support efforts that increase the likelihood that the target market will move to the mill district. Efforts to entice target populations to come to the mill district can be fostered by the Community. For example, the Community could consider working with the local and state government to **support the arts through tax incentives and financial incentives**. In Pawtucket, for example, there are a number of incentives for artists that live and work in the city. The first is that they do not have to charge or pay sales taxes on art sold and purchased in the Pawtucket arts district. Property taxes are also lower in the arts district to promote housing and loft style living. Similar incentives could be adopted in Lawrence, making it financially easier for artists to move to the mill district.

The Community should also do what they can to **engage cohousers and other potential residents**. Because cohousers want to be active in the community where they live, they would likely enjoy being part of Community efforts, even before they move to Lawrence. Cohousers may be interested in volunteering in the community early on or attending various functions and events. **Inviting prospective cohousing residents to participate in Community events and volunteer** will make them feel welcome and enhance the possibility that they will remain committed to moving to Lawrence.

The Community can also do what it can to **help Lawrence's mill district distinguish itself as a model for green design**. As described before, green building features can

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 $^{^{91}}$ Bailly, Henri-Claude. Principal, Resource Capital Group. Interview, June 2004

lower operating costs, but also attract consumers who care about the environment. If mills in Lawrence are converted in a green way with features described in the Green Building Appendix, Lawrence's mill district could serve as an international model for green design. Already Lawrence CommunityWorks is applying green design in their Our House project, a community center. Bob Ansin also envisions the Wood Mill as a green conversion. To move this process along, local community development organizations could create green design recommendations for the mill district. They could also help match mill owners and developers with technical assistance and funding sources.

Part of being a "green" mill district, also means **emphasizing the area's natural resources.** Efforts of Groundwork Lawrence, such as the Spicket River Greenway campaign and plans for canal restoration, should be continued and expanded. Increasing opportunities to access the water and enjoy the natural surroundings either on boat, on a bike, or by foot should be a priority.



Emphasizing
Lawrence's natural
resources and
renovating the mills
in a green way could
set the district apart
as a model green
community.

Strategy 4. Seek funding for collective improvements for the mill district that could facilitate development. The Community should also work to seek funding for projects such as public structured parking, canal and riverfront improvements, public open space, and public art. Implementing such measures in Lawrence could reduce costs for mill owners and developers and increase the likelihood that target populations will want to live in the mill district.

One example of this strategy would be to seek funding for public parking in the mill district. In Lawrence, most mills in the mill district have limited parking. Sharing the burden of parking between a few developers and the city, may prove more economical, especially given the limited space at the mills. Under this scenario, mill owners and developers can partner with the city and community development organizations to create a number of public parking structures in close proximity to the mills. Public funding could pay for the bulk of the cost of these facilities and developers could pay a fee to use the parking spaces.

In combination with the new parking that comes out of the Gateway Project, this initiative may prove to be the most cost effective solution and begin to alleviate some of the parking stress that is stalling mill redevelopment projects. From an aesthetic perspective, a few tastefully designed parking structures, perhaps in obsolete mills that cannot be used for housing or office space, with ground floor retail in strategic locations could be an economic and aesthetic asset. Such structures would be more appealing than having many parking lots or structures at each mill, which could over power the district. Ground floor retail could also add life, filling in some of the physical gaps that exist in the urban fabric.

Strategy 5. Involve current and future residents in planning and individual building design to ensure that they will benefit and to solve the design challenges that may exist when attempting to house diverse populations under one roof. Above all, as redevelopment proceeds, standards of public participation set by efforts like the Reviviendo Gateway Initiative should continue.

Involving residents in the planning process can be a win-win situation. Involving current residents in the planning process, as well as helping them purchase or rent in the mill district, will prepare current residents to enjoy the success of the mill district's redevelopment. Public participation in design and planning could also better ensure that the diverse design needs of each of the identified target populations are met. In the long term, this approach could create a major turnaround in Lawrence and build an initiative that helps the city emerge again as a regional cultural center.

Another approach to ensuring that the needs of Lawrence's current residents are met is by figuring out how **nonprofit organizations could be partners in redevelopment deals**. Already, Lawrence CommunityWorks is interested in being an equity partner in a mill conversion project. They could also help secure funding and increase the likelihood that the needs of low income families are met in these buildings.



Funding could be sought to convert obsolete buildings like the Lincoln Foods building, shown above, into a public parking structure with ground floor retail.

Final Remarks

Perhaps the foremost indicator that Lawrence's mill district is ready for redevelopment is the community energy that exists in the city. This energy can only be experienced when talking to residents, attending community planning meetings, and observing neighborhood cleanup days and festivals. This degree of excitement and dedication is an obvious strength for Lawrence.

However, for redevelopment to occur mill owners and other community members will likely need to partner with professional developers that will take the lead on individual mill conversion projects. As sole owners or partners with mill owners, developers can help manage some of the risk associated with developing in Lawrence's untested residential mill conversion market. This risk is real in Lawrence, because the margin between achievable prices and costs is tight. An experienced developer with deep pockets and a proven track record needs to be at the table to increase the probability of success of these project, and to magnify the benefits of redevelopment for mill owners, the community and future residents of the mill district.

The second and final conclusion reiterated many times in this report is that mill owners, developers, local government, community development organizations, and residents need to continue the precedent for collaboration set forth by participatory planning efforts like the Reviviendo Gateway Initiative. In doing so, Lawrence's mill district will distinguish itself from mill conversions in other cities and become home to residents who will be socially and financially invested in the city.

Appendix A. Reviviendo Gateway Initiative

The following includes the vision statement and goals of the Reviviendo Gateway Initiative, a major campaign currently underway that will inform the redevelopment of the mill district. 92

Reviviendo Gateway Initiative Vision Statement and Goals

I. Vision Statement

Background

The Lawrence Gateway Project is one of the most ambitious economic development projects in the region, with more than 150 million dollars committed to improving the entrance to the City from Route 495, creating new transportation access, and supporting economic growth. Recognizing the importance of this investment to the larger community, Lawrence CommunityWorks (LCW) and the Reviviendo Planning Group (RPG) convened a Summit in May 2001 to talk with North Common neighborhood residents about the impact and potential benefits of the Gateway Project. These discussions established the momentum for a broader community process, bringing together constituents from the North Common neighborhood, mill district and The Reviviendo Gateway Initiative, staffed by LCW and Groundwork Lawrence in partnership with the City, began with a series of focus groups that attracted more than a hundred participants. Out of these focus groups, a 38-member Steering Committee was formed to guide the development of a vision, goals and coordinated investment strategy linking the North Common neighborhood, mill district and downtown. As members of the Steering Committee, we hope this vision will act as a beacon and guide for future efforts to rebuild our community.

Our Vision

We, the Reviviendo Gateway Steering Committee, envision the Gateway district as the historic heart of an international city- a place that is vibrant, dynamic, diverse and proud. We envision clean streets and beautiful parks, safe neighborhoods, and a thriving business district with new job opportunities. We envision a local economy built on creativity and entrepreneurship, from software engineers to metal smiths. We support the development of arts and cultural facilities that highlight our unique talents. We support a sustainable mix of uses, with housing, shops, restaurants, recreation, and offices within walking distance of each other. As we look to the future, we also recognize the need for measured progress that balances new development with affordability. We are committed to making the North Common neighborhood, mill district and downtown a place of opportunity, through investments in high-quality housing, jobs, and education.

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⁹² Copied verbatim from Reviviendo mission statement.

II. Goals

Image and Character

- Improve the image and perception of the City among both residents and visitors.
- Create a stronger sense of pride and ownership.
- Increase positive publicity about the City.

Public Environment/ Open Space

- Create a comfortable pedestrian environment that encourages people to walk.
- Keep the streets, sidewalks and public areas clean and well-maintained.
- Restore the canal and bridges as a historic centerpiece of the mill district.
- Develop coordinated landscape improvements, including street trees and flowers.
- Install coordinated street signs with information about facilities and services.
- Provide kiosks or information booths to orient visitors to the area.
- Promote façade and signage improvements for commercial buildings.
- Create landscaped avenues connecting the North Common neighborhood, mill district and downtown.
- Clean up the Spicket River and create a new Greenway for walking and biking.
- Create a continuous riverfront promenade along the Merrimack River.

Housing

- Upgrade the existing housing stock in the North Common neighborhood and maintain it at a higher standard.
- Create more housing and homeownership in the North Common neighborhood, in the mill buildings, and in upper-floor units downtown.
- Create more quality affordable housing for North Common and city residents.

Employment, Education and Training

- Provide education, training and job opportunities for North Common and city residents.
- Create a diversified local economy with a range of employment opportunities, from high-tech to services and manufacturing.
- Encourage the development of day care and other supportive services in the North Common neighborhood and in close proximity to jobs.

Retail, Services & Restaurants

- Promote the development of the mill district and downtown as an after-work and weekend destination with shopping, entertainment and restaurants.
- Market and promote locally-owned businesses to city residents, visitors, and tenants of the mills.
- Encourage the expansion of existing services and the development of new services (coffee shop, gym, food market, etc.) in the North Common neighborhood, mill district and downtown.
- Create spaces and events for local employees to network and socialize.

Arts and Culture

- Create new venues for arts and education (galleries, museums, performance halls) in the North Common neighborhood, mill district and downtown to serve both local and regional audiences.
- Integrate art with open space and the public environment (outdoor sculpture, interactive art, etc.)
- Develop new festivals, concerts and public events that highlight the arts.

Youth Development

- Create new recreational facilities and places for young people to gather.
- Develop educational and leadership programs for local youth in the North Common neighborhood, mill district and downtown.
- Connect local students with jobs in the area through education and training initiatives.

Transportation and Parking

- Provide frequent and accessible public transit service connecting the North Common neighborhood, mill district, downtown, and the train station.
- Manage transportation access to avoid conflicts between trucks, cars, and pedestrians.
- Increase the number of people walking and biking rather than driving.
- Improve traffic flow on Essex Street.
- Provide sufficient well-marked and easily accessible parking throughout the North Common neighborhood, mill district and downtown.

Safety

- Increase the sense of safety by increasing the number of eyes on the street.
- Improve street lighting to create better security, especially in residential areas.

Appendix B. Mill Conversion Case Study Summaries

Four mill conversion projects in Lowell, Lynn, and Pawtucket were studied for this report. Details of each of the projects are discussed frequently in this report. The following provides a brief summary of each of the projects.

The Boston Machine Lofts, Lynn



View of the Boston Machine Lofts, Lynn⁹³

The Boston Machine Lofts, a former industrial building in downtown Lynn, was redeveloped by the Resource Capital Group, a Cambridge development and property management firm. The project was completed in June 2004, opening the doors to 30 loft-style units.

Lynn, like Lawrence, has some of the negative stigmas associated with any third tier city. As a matter of fact, Henri-Claude Bailly, the developer, explained, "We were told that we were totally crazy. Nothing in Lynn ever sold for the price we were projecting." However, RCG saw the area as an opportunity waiting to happen.

RCG identified a number of assets that Lynn has including its location – it is only twenty minutes form Boston on the commuter line and it is on the water. Because of its location, paired with a city government that is eager to help developers, the firm identified the city as a strong location for loft style condos. They realized that property in Lynn was undervalued. It was not selling for replacement value. RCG saw this gap between pricing and cost as an opportunity. In a community that is undervalued, Bailly says "Land is virtually free."

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⁹³ RCG, Boston Machine Lofts Website, www.bostonmachinelofts.com, 2004

Mass Mills, Lowell⁹⁴



View of Mass Mills, Lowell⁹⁵

The Mass Mills complex was historically a textile mills built in stages between 1839 to the 1890s. However, between 1925 and 1960 the mills began to become obsolete, as textile production moved to North Carolina. In the 1970s, Patrick Mogan, a local resident, began to develop a vision for the revitalization of Lowell, a vision in which mill redevelopment was at the forefront. In 1986, Joe Mullins, President of Mullins Company, was invited by a broker to visit what is today Mass Mills. Mullins had already converted the Keystone building, another mill on the south shore, into housing. When he saw the complex's prime location adjacent to the Concord and Merrimack Rivers, he said "I knew its potential." The fact that no one was currently occupying the buildings also limited upfront cost, because no relocation cost would have to be paid. They purchased the building in 1987 and finished Phase I of the project by 1989, opening 282 rental units. They have recently begun phase II. By summer 2006 they will open their doors to 165 new apartments.

Boott Mill, Lowell⁹⁶

As Chris Starr, WinnDevelopment principal, explained, "Winn stumbled on the Boott Mill by accident. Winn's bread and butter is recapitalizing and renovating older tired subsidized rental housing from the 1960s to the 1980s. There's not a lot of market risk, because it's already housing."

However, Winn agreed to do the project after they were contacted by the owner of the complex. The owner had already developed an adjacent 90,000 square foot mill building into small offices, his expertise. However, he recognized that for the entire complex to be a success, residential was a must. In July of 2003, Winn purchased the

94 Mullins, Joseph. President, Joseph R. Mullins Company. Interview, June 2004

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⁹⁵ Mass Mills Website

⁹⁶ Starr, Christopher. Principal, WinnDevelopment, Interview, June 2004

West and East Mills, 200,000 square feet in total, made up of 5 separate but connected buildings located on the river.

Winn saw the purchase as an opportunity for a number of reasons. As Starr points out, "this is not a pioneering building. Although doing any mill building has risk, this was not terribly risky." Starr explained that the infrastructure around the mill building was very modern. Three hundred feet from the entrance to the building is an 1100 square foot parking lot. Boarding House Park, a successful city run park with many activities, is also located in close proximity to the buildings. The Riverwalk, a two mile path that runs along the river, begins behind the mill.

They currently are redeveloping 154 residential rental units. The project will have 73 one bedrooms, 73 two bedrooms, and 8 three bedrooms.

Bayley Street Lofts, Pawtucket, Rhode Island



View of Interior of Bayley Street Lofts, Pawtucket⁹⁷

Where Lawrence, Lowell, and Lynn are primarily markets of Boston, Pawtucket is primarily a market of Providence, Rhode Island. However, unlike downtown Providence which retains most of its historic character, Pawtucket was a victim of urban renewal in the 1960s. As a result, much of its historic downtown is interrupted with 1960s style buildings. Bayley Street Lofts is located adjacent to downtown. Peter Gill Case, one of partners of 7 Seven Stone Building Group, the project's developers, calls the area a "frontier. Nothing is happening. Next door is a welfare office." But, he and his partner saw the area as an opportunity. A strong artist movement is taking place in the city and other developers are making their mark. He and his partner bought the 40,000 square foot mill and 40 parking spaces from the city of Pawtucket for \$1. Construction of 25 artist live/work units is currently underway.

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⁹⁷ Bayley Street Lofts, <u>www.7stone.com</u>, 2004

Appendix C. Market Analysis

The following data and graphs inform the market analysis discussed in Chapter V - The Market for Housing in the Mill District. To make this data easier to review, graphs presented in Chapter V are also repeated here. Data for the following section was collected through MLS sales listings, talking to property managers, interviewing developers, interviewing brokers, and reviewing project websites. As discussed in Chapter V, all data from other projects should be taken with a grain of salt, because cities vary considerably in terms of pricing. As demonstrated by the following examples, pricing can also vary considerably within a specific building.

Rental Pricing

Lawrence Rents

The following tables show rents in Lawrence of higher end units. Museum Square is the only mill conversion project in Lawrence. The other projects are apartment complexes with amenities including pools, recreational space, and parking. It should be noted that the other projects are located close to the Andover line and thus can likely achieve higher rents than apartments in the center of Lawrence. In the table, "high" and "low" indicate the range of rents for one or two bedroom units.

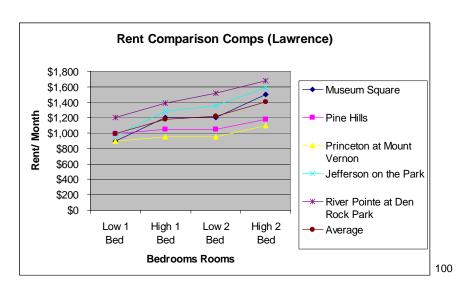
Rents in Lawrence (June 2004) ⁹⁸								
	Low Bed	1	High Bed	1	Low Bed	2	High Bed	2
Museum Square	\$900		\$1,200		\$1,200		\$1,500	
Pine Hills	\$995		\$1,050		\$1,050		\$1,175	
Princeton at Mount Vernon	\$895		\$950		\$950		\$1,100	
Jefferson on the Park	\$970		\$1,285		\$1,355		\$1,590	
River Pointe at Den Rock Park	\$1,200		\$1,390		\$1,520		\$1,675	
Average	\$992		\$1,175		\$1,215		\$1,408	
median	\$970		\$1,200		\$1,200		\$1,500	
Min	\$895		\$950		\$950		\$1,100	
Max	\$1,200		\$1,390		\$1,520		\$1,675	

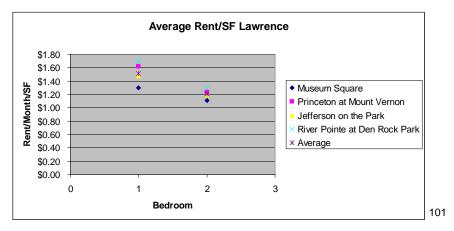
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⁹⁸ Torres, William. Property Manager, Museum Square. Interview, June 2004; Property managers at Princeton at Mount Vernon, Jefferson on the Park, River Pointe at Den Rock Park, Inquiry phone calls, July 2004

Square Foot Size of Units in Lawrence (June 2004) ⁹⁹					
	SF Low 1	SF High 1	SF Low 2		
	Bed	Bed	Bed	SF High 2 Bed	
Museum Square	770	850	1116	1136	
Pine Hills	932	932	932	932	
Princeton at Mount Vernon	570	570	700	820	
Jefferson on the Park	590	931	1038	1271	
River Pointe at Den Rock Park	671	855	1072	1101	
Average	707	828	972	1052	
median	671	855	1038	1101	
Min	570	570	700	820	
Max	932	932	1116	1271	

This information can be interpreted in the following graphs.





⁹⁹ Torres, William. Property Manager, Museum Square. Interview, June 2004; Property managers at Princeton at Mount Vernon, Jefferson on the Park, River Pointe at Den Rock Park, Inquiry phone calls, July 2004

¹⁰⁰ ISIP 101 ISIP

Lowell Rents

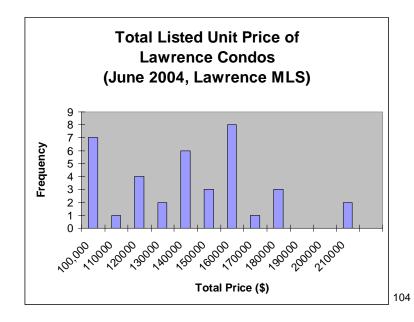
As described in Chapter V, rents in Lowell can also be informative. Again, it should be noted that the Lowell market is not necessarily the same as the Lawrence market. Lowell has a well established mill conversion market. In the following table, all projects are located in historic building conversions. The 305 Dutton Street and Mass Mills projects are mill conversions.

Lowell Rent Comps						
	One Bedroom	One Bedroom S	FTwo Bedroom	Two Bedroom Square Feet		
16 Merrimack Street Apartments	\$850 to \$1050	606 to 752	\$1100 to \$1250	800 to 1000		
295 Dutton Street Apartments	\$850 to \$1050	605 to 752	\$1100 to \$1250	1000 to 1200		
338 Market Street (King Building)	\$900 to \$1000	600 to 750	\$1050 to \$1200	900 to 1000		
305 Dutton Street Apartments	\$850 to \$1100	850 to 1003	\$1,600	1120 to 1549		
Mass Mills	\$895 to \$1050	600 to 800	\$1000 to \$1300	800 to 1200		

Condo Pricing

Lawrence Condos

The following shows the number of condo units by price listed in Lawrence in June 2004. Most of these units are two bedroom units. Data is very similar to actual sales for two bedroom units. However, actual sales almost never go above \$190,000 or \$200 per square foot. 103



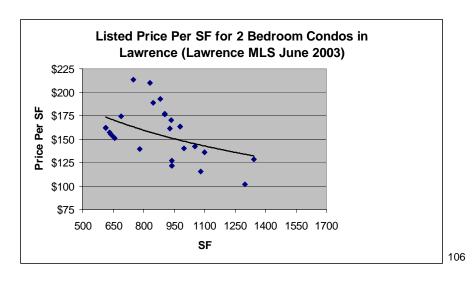
¹⁰² Inquiry call to Mass Mill property manger; Rental listing websites advertising 16 Merrimack Street Apartments, 295 Dutton Street, Market Street King Building, and 305 Dutton Street.

Actual sales data is not given, because of a confidentiality agreement with the EdgeGroup who provided actual sales data on a similar number of condo projects in Lawrence and Lowell.

¹⁰⁴ MLS Listings from Jennelle Graziano, realtor, June 2004



The relationship between unit size and price is shown on the following graph.



Condos in other Communities

Statistics on comparable conversion projects in Lowell, Lynn, and Brockton are shown below.

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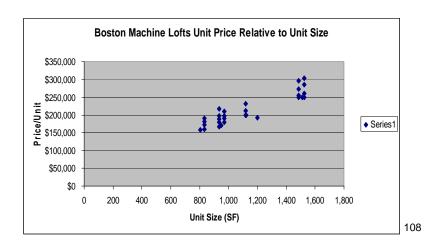
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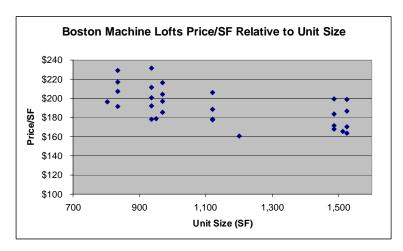
 $^{^{105}\,}$ MLS Listings from Jennelle Graziano, realtor, June 2004 $^{106}\,$ ISIP

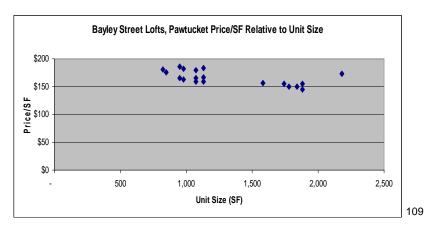
Compara	Comparable Condo Mill Conversions ¹⁰⁷					
	Unit Size	Price/SF	Price			
Boston Machine Loft						
Average	1,134	\$191	\$213,833			
Median	1,045	\$190	\$199,400			
Max	1,525	\$232	\$302,900			
Min	804	\$161	\$157,900			
Bayley St	reet Lofts					
Average	1,317	\$166	\$215,205			
Median	2,180	\$173	\$377,900			
Max	2,180	\$186	\$377,900			
Min	825	\$145	\$149,000			
Lowell Mi	ddle Street					
Average	892	\$185	\$166,571			
Median	841	\$190	\$159,400			
Max	1144	\$211	\$239,900			
Min	750	\$159	\$121,819			
Etonic Lo	fts, Brockton					
Average	944	\$237	\$221,887			
Median	938	\$235	\$219,900			
Max	1111	\$287	\$259,900			
Min	836	\$189	\$199,900			
Fairborn	Building, Low	ell				
Average		\$200 to \$250				
Aire Lofts	s, Lowell					
Average	900	\$200 to \$250				

Graphs detail the pricing in some of these buildings is shown below. It should be noted that the Boston Machine Lofts and the Middle Street projects are the only two projects that are complete and have sold all their units. The other projects are just price projections. The Bayley Street Lofts and the Etonic Lofts are still in construction and not all sold.

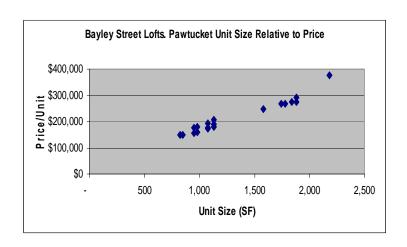
¹⁰⁷ RCG, Boston Machine Lofts Website, www.bostonmachinelofts.com, 2004. Faust, Fred. President, EdgeGroup Inc. Interview, June 2004; Gill Case, Peter. President of Truth Box Architects and Seven Stone Building Group Inc. Interview, July 2004; Etonic Lofts Website, 2004







¹⁰⁸ RCG, Boston Machine Lofts Website, <u>www.bostonmachinelofts.com</u>, 2004. Faust, Fred. President, EdgeGroup Inc. 109 Gill Case, Peter. President of Truth Box Architects and Seven Stone Building Group Inc. Interview, July 2004



Appendix D. Housing Product Design Requirements

The following sections include specific design requirements of three identified niche housing products - artist/live work space, cohousing, and green building. Additional information on cohousing is also provided in the Cohousing Appendix. Additional information on green building is provided in the Green Building Appendix.

Artist Live/Work Space Design Requirements

The Boston Redevelopment Authority and Artspace Inc. recently surveyed artists to acquire a better understanding of their space requirements in live/work units. What they found was that "while specific spatial requirements vary between individuals, a unit which provides for both living and working areas needs to have more square footage and possibly more rooms than a simple studio or efficiency apartment which provides for living only." This survey also had the following results:

- ½ the artists need less than 500 square feet for their work area and 1/3 of the artists need between 500 to 1000 square feet
- ¾ of artists have natural light as one of top preferences
- 30% of artists need special ventilation
- 31% need additional storage
- 28% need soundproofing
- 16% need oversized doors
- 7% need high load bearing floors
- 15-20% need high-speed data lines

Other recommendations include "providing additional dumpster capacity for the artists as well as an established procedure for disposing hazardous materials. Insulation and fire safety systems should be designed with the ability to respond to accidents in the artists' spaces (the BRA recommends industrial-strength)." A freight elevator is also recommended.¹¹⁰

Artists tend to also prefer simpler less finished spaces. They want few modifications to the original space as possible, keeping it open and airy, with exposed brick and beams, and with few finishes. Individual units should have proper ventilation because of chemicals or paint used in the art making process. More space is also a plus.

If the space is geared to the 'light' arts, such as painters, individual units can be very similar to traditional lofts for non-artists. However, if the building is geared to other artists such as sculptors or pottery workers, the designer should consider ways to reduce noise, as well as try to satisfy equipment requirements for kilns, welding, and wood working tools. One solution to these challenges would be to locate various

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¹¹⁰ Krystal England Thesis Reference to Boston Redevelopment Authority. "Artist Live/Work Specific Design Guidelines." BRA, June, 2003.

workshops in the lower floors of the building. A specific wing of the building could also be designated for heavier arts to isolate noise from other tenants.

Buildings could also be designed with non-livable artist studio space on the first floor. Apartments in the upper floor of the building could be traditional living spaces, but tenants living in the building would be offered first dibs on the studio spaces. This alternative can be a good way to retain affordable housing subsidies, which often prohibit artist live/work space.

The developer or building owner should also consider creating public galleries in the lower floors. Not only would gallery space appeal to artists, but it would attract visitors and activity to the mill district. As mentioned previously, art activity can spur economic development, and any way to show activity will make a difference to the area. There is no reason to not celebrate the art that is taking place in a building.

Cohousing Design Requirements

Cohousing is also discussed in the Cohousing Appendix. However, specific physical design requirements are described below.

As mentioned, cohousing projects can look very similar to a typical condo or apartment building. The main difference is that in addition to individual units, these buildings have common space for every 30 units. Common space requirements depend on the needs of the group, but generally include at least a kitchen and an eating area large enough for members of all 30 households.

It should be noted, that an entire mill does not need to be 100 percent cohousing. Depending on the demand for cohousing it is possible to have only some of the units in a building designated as cohousing. For example, one "neighborhood" of 30 cohousing families could be in one wing of a 100 unit building. The other 70 units could be typical loft style units, artist live/work space, or affordable housing.

Cohousing residents also need to be involved in every step of the design process. A cohousing consultant, described more in depth in the Cohousing Appendix, can help to facilitate that process.

Green Design Requirements

The following is a summary list of features that may be included in a green mill. A detailed description of green building features, how to determine which features are right for a specific mill, and funding sources to help pay for green features in described in the Green Building Appendix.

Tighter Building Envelope

- Insulation
- Double Or Triple Paned Windows

Energy Conservation

- Energy Star Appliances and Lighting
- Compact Fluorescent Lighting
- Occupancy and daylighting sensors
- Heat Recovery Ventilation
- Geothermal Heat Pumps

Water Conservation

- Low Flow Showerheads, Faucets, and Toilets
- Greywater System

Healthier and Sustainable Materials

- Low VOC Glue and Paint
- Certified Wood from Sustainable Forests
- Recycled Building Materials

Alternative Energy Sources

- Hydro Power
- Solar Power

Sustainable Landscaping and Site Planning

- Native Plants
- Greywater System for Irrigation
- Stormwater Runoff Prevention
- Parking Spaces for Bikes
- Opportunities to Enjoy Nature

Waste Recycling During Construction

Salvaging Materials

Appendix E. Cohousing

This appendix describes the legal and financing structure of a cohousing project. Toward the end of this appendix are the results of a survey that was given to households that have been attending cohousing meetings held in the Lawrence mill district. This survey provides good overview of who these potential residents may be and what preferences they have.

Cohousing projects look somewhat different than other development deals, from a legal and financial perspective, because residents are involved in planning and are also equity investors in the project. In terms of financing, cohousing projects follow the equity/loan deal described above, but the primary equity investors are cohousers instead of the developer.

The following describes what the legal and financial structure would look like if a cohousing project occupied 100% of the mill building. However, it is possible for cohousing to occupy only a portion of the building. If that is the case, the developer would take the lead on making overall decisions for the project. The cohousers would make fewer decisions.

Three cohousing coordinators were interviewed for this appendix. They included representatives from Development Cycles, the Cohousing Company, and Cohousing Resources, LLC. Coordinators act as intermediaries between the cohousers and the developers or contractors who construct these projects. Coordinators work hand and hand with the future residents, helping them develop a strong and functional community, walking them through the development process, and helping them work with the developer.

Generally a cohousing project starts with a few people sitting in their living room who come upon the topic of cohousing in conversation. Perhaps this leads them to considering starting their own cohousing neighborhood. Then they may read a book on cohousing or surf the web on the topic. However, the next step is a tricky one. Where do they go from there? Cohousing families generally are not developers. They probably have never even built their own house.

Thus, many times this informal group contacts a cohousing coordinator who helps get them to the next step. The coordinator may help the group define their goals. Then they generally act as the intermediary between the developer, architect, and contractor, while keeping the cohousing members actively involved in decision making. Sometimes coordinators take on the role of developer. All three coordinators interviewed live in cohousing communities and are big believers in the model. They also all of course charge a fee for this service¹¹¹. The coordinators interviewed charge between 3 – 10%

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¹¹¹ ScottHanson, Kelly. Cohousing Resources, LLC. Interview, April 2004

of final sales price of the units. If they are also the developer, they charge an even larger percentage. ¹¹²

Legal Structure

The cohousing legal structure is summarized in diagram 1. Prior to development, the members of the cohousing group (i.e., the future residents) form an LLC. This legal formation protects them from liability associated with development. However, equally important, it enables them to move money around as a group and take out construction loans and make group purchases.

Different cohousing projects have formed different legal structures. Three separate LLCs are formed in the Cohousing Resources, LLC model. A *Members LLC* is composed of just the future homeowners. The coordinator forms a second *Coordinator LLC* that is in charge of managing the project. This LLC is in charge of hiring the engineers, contactors, and developers (if applicable) and spending the money. Then a *Third Party LLC* is formed, composed of the *Members LLC* and the *Coordinator LLC*.

Generally with a coordinator's assistance (although some cohousing communities work without outside help), cohousers chose to either hire a developer or develop the project themselves. The benefit of hiring a developer is that the developer has gone through the process before and they assume some of the financial risk. However, the drawback is that when working with developers, cohousers can lose some control of the planning process, an extremely important element of forming a cohousing neighborhood. Like any other development process, the developer would receive a fee or a percentage of sales. Developers need to be very sympathetic to the cohousing concept because of the time and community involvement required in the cohousing model. 114

Once the buildings are ready to be occupied, the legal structure generally changes to a condominium arrangement. Like any other condominium, residents own their individual units and hold a proportional share in the common facilities. Like any other condominium structure, they pay monthly maintenance fees to the condominium association. ¹¹⁵

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ScottHanson, Kelly. Cohousing Resources, LLC. Interview, April 2004; Ryan, John. Development Cycles. Interview, April 2004; McCamant, Kathryn, Cohousing Company. Interview, April 2004

¹¹³ ScottHanson, Kelly. Cohousing Resources, LLC. Interview, April 2004

Ryan, John. Development Cycles. Interview, April 2004

Brenton, Maria, We're in Charge: Cohousing Communities of Older People in the Netherlands: Lessons for Britain, Policy Press: the Housing Corporation, 1998.

Legal Structure

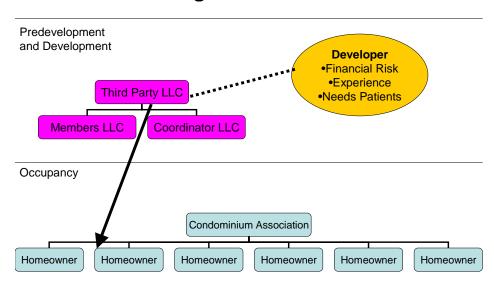


Diagram 1. Cohousing Legal Structure

Financing Structure

The main differences between a cohousing project and condo project from a financing perspective are summarized in the following table.

Financing Construction Costs

Cohousing	Condominium
Larger Nonrefundable Deposit	Smaller, Often Refundable, Deposit
Used for Soft Costs	Held in Escrow
Investment Required from Day 1	Investment Closer to the Day of Construction
High Risk	Low Risk
Consensus Requirement	No Requirement

The financing structure is shown in diagram 2. Like any other development project, lenders generally require at least 20% equity for the construction loan to develop the project. In the Cohousing Resources, LLC model, cohousers are required to put up at least 10% of the cost of their units to meet this equity requirement. This is the first money into the project and is thus the riskiest. The next 10% of the 20% of equity required by the lenders is invested by the cohousers themselves and by socially

responsible investors. Often, the socially responsible investors are big believers in the cohousing model and come from established cohousing communities. 116

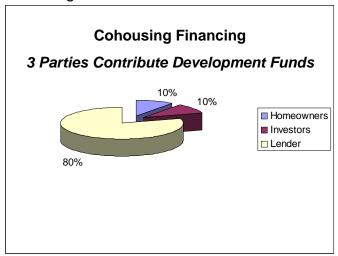


Diagram 2. A lender, homeowners, and private investors help fund the development of cohousing projects. The investment breakdown is shown above.

The Cohousing Resources, LLC model gives different tiers of returns for this initial investment, depending on when investors put in their money. The Development Cycles model follows a similar structure. However the first 10% provided by households offers no return, whereas the second 10% offers a return. The Cohousing Company model requires that homeowners put in at least 5% of the expected sales prices. The Cohousing Company model, like the Cohousing Resources, LLC model provides a return on all investments. Again, this is the first money that goes into the pot during the predevelopment phase. The

This upfront equity investment is very different from that which is made in a typical housing development. In a typical condominium project, future homeowners may just put down a deposit, which is often far less than 5%. This deposit is then held in escrow and not used until the condo is complete. It is also often refundable up to a certain point. In contrast, in the cohousing model, money is used for soft costs from the day it is invested. It is not refundable and completely at risk if the project goes sour. 119

With the household equity contribution comes the legal requirement for consensus. Consensus is required in these cases because household investors are not generally professional investors or high wealth individuals. These "non-sophisticated investors" are protected by law. Legally, their money cannot be spent during the development period and predevelopment process, unless decisions are made by consensus. Consensus decision making is also consistent with the participatory mission of

¹¹⁶ ScottHanson, Kelly. Cohousing Resources, LLC. Interview, April 2004

¹¹⁷ Ryan, John. Development Cycles. Interview, April 2004

¹¹⁸ McCamant, Kathryn, Cohousing Company. Interview, April 2004

¹¹⁹ Ryan, John. Development Cycles. Interview, April 2004

cohousing. However it does add a major layer of complexity to the development process. 120

In addition to having the benefit of equity investors on hand, cohousing also has the added benefit of being mainly pre-sold, before the first shovel hits the ground. Cohousing Resources, LLC will not even start shopping for a loan until 50% of the units are pre-sold. They won't sign for a loan until 70% of the units are pre-sold. Lenders like the fact that so many of these units are pre-sold. It decreases their risk. 121

Once the units are complete, the Third Party LLC sells the units to the individual homeowners. It is important that the Third Party LLC is holding the units, because homeowners cannot legally sell the units to themselves. At this stage, homeowners take out a regular home mortgage to finance the rest of their condominium share. The amount that they initially invested in the project becomes their down payment, as does any return made on the initial investment. By rolling this money into their down payment, the homeowners avoid paying capital gains taxes or income tax on their initial investment. 122

Time Frame

Each cohousing project is different. However, cohousers are generally encouraged to establish their Members LLC immediately. They may work for a year together before they pay the coordinator anything or before they have a site picked out. However, during this year they are often required to invest small chunks of money into the membership pool. 123

For example, in the Development Cycles model, after the first few meetings, potential homeowners are required to put \$200 per month into the project until the units are designed. Once the design is complete, they are then required to put the rest of their equity requirement, approximately 10%, into the pool. This incremental investment period may occur for two to three years before the first dirt is even moved. It generally starts before the group even has a piece of land. Money invested tends to be nonrefundable. 124

Development Cycles see the upfront monthly investment as crucial to the success of cohousing. Because people have to put cash on the line from virtually day one, it helps ensure that those involved in planning are going to actually live in the project and take the planning process seriously. It also provides necessary funding for upfront soft costs. Because the funding comes primarily from within the group, instead of from an outside developer, residents also retain more control of the project. Of course, the

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¹²⁰ ScottHanson, Kelly. Cohousing Resources, LLC. Interview, April 2004

¹²¹ ISIP

¹²² ISIP

¹²³ McCamant, Kathryn, Cohousing Company. Interview, April 2004

¹²⁴ Ryan, John. Development Cycles. Interview, April 2004

¹²⁵ ISIP

downside to this arrangement is that this process excludes some households, because they cannot afford the investment or the risk. 126

It should be noted that one of the reasons that households are willing to put part of their life savings on the line from the beginning is because of the cohousing model itself. This model creates a strong sense of community and trust. This level of trust becomes stronger over time, as households are required to put more money into the pot. People involved in cohousing also have very passionate ideals about the meaning of community. Perhaps for these reasons, households are willing to put money on the line, whereas in a typical project they would refuse.

If a mill owner is interested in investigating cohousing at their mill, it generally makes sense to contact a cohousing coordinator. The coordinator can help alleviate some of the complexity of this model. In the end the project could be one that has substantial benefits to residents and the community at large.

Lawrence Mill District Cohousing Survey Results

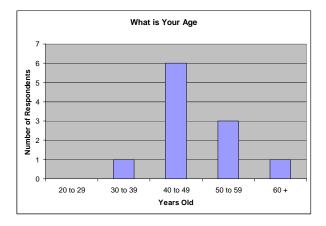
The following survey was given to 18 households who attended a monthly cohousing meeting held in Lawrence in June 2004. 15 head of households completed the survey. These households represent families who are particularly interested in cohousing, demonstrated by their continued attendance at cohousing meeting facilitated by Chris Scott Hanson. This group emerged out of the information meeting held in March 2004 for housing at the duck mill.

Results provide a good overview of who these potential residents may be and what preferences they have. Results should be used to inform redevelopment and marketing efforts. The results of this survey are summarized as follows.

I. Background Information

1. What is your age?

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¹²⁶ McCamant, Kathryn, Cohousing Company. Interview, April 2004

2. What city do you currently live in?

City of Current Residence					
City	Frequency of Response				
Cape Cod	1				
Andover	3				
Salem, NH	1				
Belmont	1				
Somerville	1				
Lawrence	1				
Randolph	1				
Everett	1				
Seattle	1				
Cambridge	1				
Lowell	1				
Concord	1				

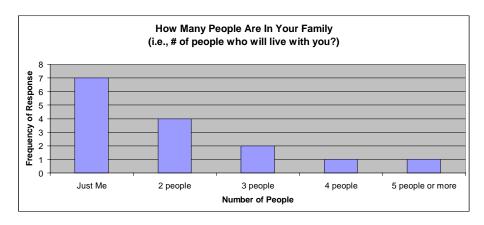
3. What city do you currently work in?

City of Employment					
City	Frequency of Response				
Cape Cod	1				
Various	1				
Burlington	1				
Andover	2				
Boston	2				
Lawrence	1				
Bedford	1				
Piscataway, NJ	1				
Newton	1				
Braintree	1				
Lowell	1				
Concord	1				

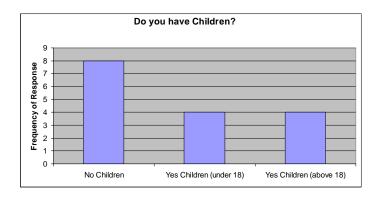
4. What is your occupation?

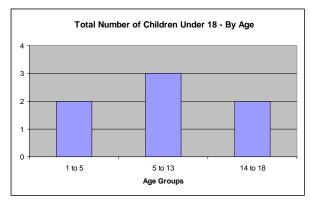
Occupation
Artist/healing facilitator
Maintenance
Inventory management
Home school mother
Marketing director
Institutional construction management
Adaptive reuse of old buildings
Principal's secretary
Corporate financial planner
Computer application support
Consultant
Psychotherapist
Professor
Product developer/seminar promoter
Owner of small outdoor walking/hiking business

5. How many people are in your family (i.e., # of people who will live with you)?

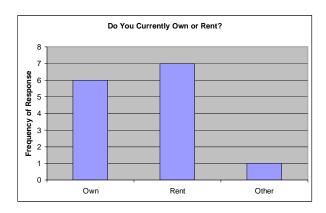


6. Do you have children at home?

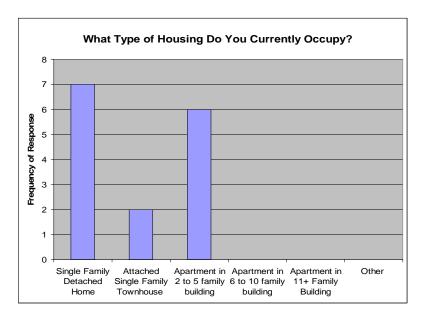




7. Do you currently own or rent?

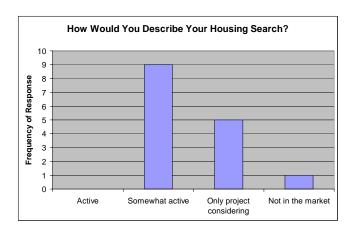


8. What type of housing do you currently occupy?

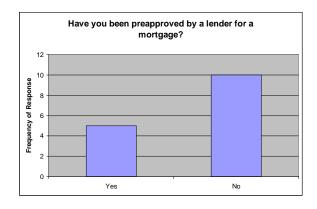


II. Housing Search

- 1. How would you describe your housing search?
 - Active. Currently on the market to purchase or rent a new home.
 - Somewhat Active. Have my eye open for a new place to live, but I am not going out of my way to find a new place to live.
 - This is the only project I am considering.
 - I am not in the market for new housing.



2. Have you already been pre-approved by a lender for a mortgage?



III. Living in Lawrence

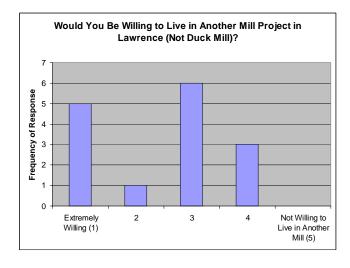
1. List 3 advantages of living in Lawrence?

	Frequency	of		Frequency	of
Advantage	response		Advantage	response	
			Nearness to work and		
Proximity to family	3		country property in NH	1	
Proximity to					
ocean/Boston/country	4		Immigrant City	1	
Building community - both					
cohousing and Lawrence as and					
ecocity	1		Near current church	1	
Vibrancy of city	1		Near friends	1	
			Historic, dynamic		
Shopping	1		community	1	
Cultural diversity	6		Public Transit Access	2	
Cost	6		Cohousing	1	
Location	2		Close to work	1	
Water - canals	3		Close to highway	1	
Not far from Boston/Cambridge	2		Architecture	1	
Will be within a community of					
people - not just place	1				

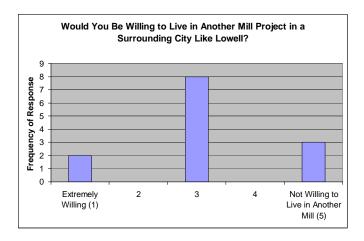
2. List 3 disadvantages of living in Lawrence?

3 Disadvantage of Living in Lawrence			Frequency
	Frequency of		of
Disadvantages	Response	Disadvantages	Response
Parking	1	Not as much green crowd	1
		Can't walk out my door onto	
property values	1	grass/playground	1
services - grocery, library, etc	1	Distance from family	1
		Somewhat long commute into	
		Boston and metro-west (where	
safety and crime rate	6	I work)	1
outdoor space	1	Not in Boston	1
poor schools	3	Gentrification	1
lack of established arts community,		Is there a market for my	
entertainment (music, theater)	1	business?	1
Uncertain future value	2	Not as close to work	1
Not as convenient (now living on T near			
Boston)	1	Economically declining city	1
		Large poor, uneducated	
Uncertain future aesthetics	1	population	1
Lack of political leadership and		City allows rampant	
planning	1	unsupervised rehabs	1
Crumbling infrastructure	1	pollution	1

3. Would you be willing to live in another mill project in Lawrence (not Duck Mill), with 1 being extremely willing and 5 indicating that you would not be willing to live in another mill?



4. Would you be willing to live in another mill project in a surrounding city like Lowell, with 1 being extremely willing and 5 indicating that you would not be willing to live in another mill?

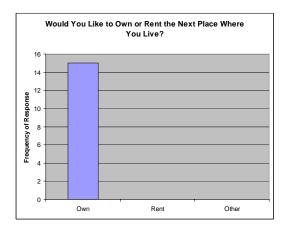


III. Housing Preferences and Duck Mill

1. What drew you to this project? Circle all those that apply and rank circled answers in order of importance, with 1 being most important.

What Drew You To This Project ? (In Order of Popularity)			
1	Estimated Price		
2	Cohousing		
3	Green Building		
4	Historic Mill		
5	Loft Living		
6	Proximity to Commuter Rail		
7	Lawrence		
8	Artist Space		
9	Other (Gary and Chet; On Water)		
10	Proximity to Work		

2. Would you prefer to own or rent your unit in the next place you live?



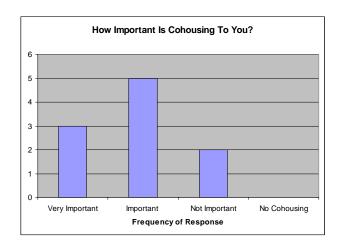
3 and 4. How many bedrooms do you want? What type of unit are you seeking? *Fill in the blank spaces.*

# of bedrooms,	_ # of bathrooms
Minimum price \$	and maximum price \$

Bedrooms	Frequency of Response
studio	1
1	4
1 or 2	4
2 or 3	1
3	2
Bathrooms	
1	8
2	3
2.5	1
Maximum Price	
\$150,000	5
\$180,000	1
\$250,000	1
\$300,000	1

5. How important is cohousing to you?

- Very important. I would not consider living here if it was not cohousing.
- Important. I think cohousing is a positive benefit of this project.
- Not important. I don't care whether or not the project is cohousing.
- I wish the project was not cohousing. I do not want to live in a cohousing project.



6. Is green building important to you? If so why?

Circle all those that apply and rank circled answers in order of importance, with 1 being most important.

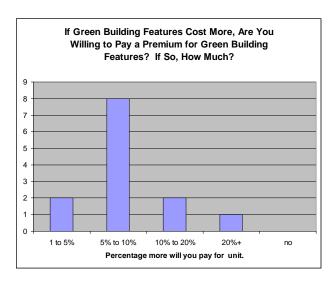
Is Green Building Important to You? If So Why? (In Order of Popularity)

- 1 Yes, green building is better for the earth.
- 2 Yes, green building means lower energy costs over the long term.
- 3 Yes, green building means a healthier place to live.
- Yes, green building means a more comfortable place to live.
- 5 No, green building is not important. (zero responses)

7. Are green building features important to you? If so, which features are important? Circle all those that apply and rank circled answers in order of importance, with 1 being most important.

Are Green Building Features Important to You? If So, Which features? (In Order of Popularity)

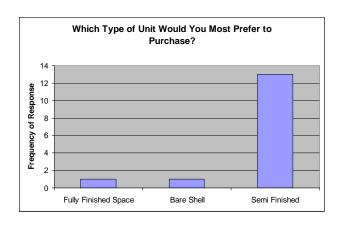
- 1 Energy Efficiency
- 2 Renewable Energy
- 3 Natural and Recycled Building Materials
- 4 Water Conservation
- 5 Sustainable Landscaping
- 6 No, green building is not important. (zero responses)
- 8. If green building features cost more, are you willing to pay a premium for green building features? If so, how much?



9. Do you want art studio space? Circle all those that apply and rank circled answers in order of importance, with 1 being most important.

You Want Studio Art Space? (In Order of Popularity) I Want Studio Space In My Unit I Want Common Art Space

- 2 I Want Common Ait Opt
- 3 | I Want Gallery Space
- 4 | I Don't Want Studio Space
- 10. Which type of unit would you most prefer to purchase?
 - Buying a fully finished space
 - Buying a bare shell (this would have no bathroom or kitchen), which you would have to finish on your own with no assistance from the developer
 - Buying a semi-finished, but habitable shell (bathroom and kitchen in place) which you would finish to your own individual taste.



11. Which common space amenities do you find desirable? Circle all those that apply and rank circled answers in order of importance, with 1 being most important.

Which Common Space Amenities Do You Find Desirable? (In Order of Popularity)

- 1 Dining Room
 - Other = Meeting space, ceremonial space, workshop, storage, guest room, music space,
- 2 outdoor gathering space, organic garden, dog play area, sewing area
- 3 Kitchen
- 4 Outdoor Equipment Space
- 5 Living Space
- 6 Indoor Children's Play Space
- 7 Gym
- 8 Studio Space
- 12. What are the most important attributes to include in this project as it moves forward? (open ended question)
 - Information Flow
 - My main focus is artist live/work space. I can finish the unit on my own. Of course Gary and Chet are big factors in this process for me.
 - I would like to see gallery/performance space in the building if it is economically possible, to open it up to the community and attract interest from outside Lawrence.
 - Group Commitment; Clear Schedule/Milestones
 - Input with architect and developer
 - Be environmentally friendly building materials; building methods (don't dump waste while rehabbing the mill; designing in energy efficiency, conservation (heating and cooling and appliance)
 - Designing in community via cohousing, design process, etcetera.
 - Working in Lawrence to help it grow economically and culturally, but not kick out the people who live there now (don't ask me how to do this!)
 - Sense of entry to cohousing neighborhood, sense of place and identity, 18 units minimum and 36 units max per neighborhood
 - Structures for commitment
 - Building community

Appendix F. Green Building

As discussed in the market section, green building can be a way to distinguish the Lawrence mill district from other communities in the Boston area. Mill buildings also tend to be inherently greener from the start, because reusing an existing building requires less materials and conserves open land.

Green building can appeal to environmentalists and people interested in saving money alike. Green building can also be extremely desirable from a comfort and health perspective. They tend to be more thermally regulated and thus more comfortable to live in on cold winter nights or in the heat of summer. Using green materials and better ventilation, also means improved indoor air quality.

Lawrence Community Works is already setting a precedent for green building in Lawrence. They are renovating a 10,000 square foot abandoned Catholic school into Our House, a community resource center. They have received funding from both the Mass Technology Collaborative and the Kresgee Foundation to study green building features and implement these improvements. The building will be LEED certified and will include features such as better insulation, an energy efficient HVAC system, photovoltaics, heat recovery ventilation units, daylighting, high efficiency lighting, and recycled and natural building materials.

Identifying Appropriate Green Features and Funding Sources - The Alternatives Unlimited Case Study

Determining what green features should be incorporated into a project can be a difficult without the right assistance. Fortunately assistance is available. The Alternatives Unlimited project in Whitinsville, Massachusetts provides a good example of the steps that can be followed to transform a mill into a green building and community asset.

Alternatives Unlimited is a nonprofit organization that provides employment, residential, day and transportation service to 650 individuals with developmental and/or psychiatric disabilities. The organization sees green building as an important component of their 35,000 square foot mill complex in Whitinsville, Massachusetts, which is slated for renovation.

Part of the goal of this project is to "transform the building into a community treasure that will bring together a wide variety of people (artists, business people, disabled people, history buffs) into a single space." The building will be used for nonprofit offices, a nonprofit theater, a restaurant, shops, a museum, and their own facilities, which will occupy between 10,000 to 12,000 square feet. It will be a highlight of the region's riverwalk and will feature green building methods. The building will have a viewing area where the public can see the hydro turbines and learn how they work and also learn about the building's other green building features.

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¹²⁷ Whitin Mill LEED/Green Roundtable, June 2, 2004 minutes summary

The First Step to Green – Determining What's Feasible

To determine how to renovate this building in a green way, Alternatives Unlimited received a grant from Massachusetts Technology Collaborative to hire an engineering consultant to study ways to improve the building from an energy efficiency and green building perspective. They also looked at how to restore the hydropower system that once powered the entire mill complex.

To help prioritize the green features that they wanted, Alternatives Unlimited held a Green Roundtable with their engineering and architectural design team, board members, staff from the chamber of commerce, a local planner, and representatives from the National Heritage Corridor. During this brainstorming day which last four to five hours, they began to look closely at what is feasible and what they wanted. The event was funded by the Kresgee Foundation. Phillip Ingersoll-Mahoney, Alternatives Unlimited, states that although the meeting was expensive, it cost over \$10,000 in fees, it drastically increased the efficiency of the project. With all the experts at the same table, problems that would generally take weeks to solve, were addressed that day. As Mahoney put it "People said they had never done it before and how awesome it was."

During this process, they also made a commitment to renovate this building following Leadership in Energy and Environmental Design (LEED) Green Building Rating System guidelines. LEED is a set of standards for green buildings established by the US Green Building Council. If buildings meet these guidelines they can get LEED certification. Certification is not necessary to be a green building, however it can help market the building and get funding from donors in a nonprofit project like this. 128

To fund some of these improvements, Alternatives Unlimited received a grant of \$324,000 from Mass Tech Collaborative, of which 70% will be used to pay for the hydro restoration and 30% will be used for green building features. It should be noted that they will be seeking more funding from Mass Tech Collaborative, because this initial budget underestimated the cost of the project.

They also received a grant from the Kresgee Foundation to pay for the incremental cost difference of the green design features. Depending on the cost of these features, the grant will be between \$50,000 to \$100,000.

In other green projects, funding is also available through Keyspan, the Energy Star low income program, and USDA rural projects program. Mass Technology Collaborative also has special funding for affordable housing.

¹²⁸ LEED guidelines

Green Building Features

To make a green building, Chris Shaffner, from Arup Engineer says four goals need to be met.

- 1) Safety and Health. Indoor air quality and other safety considerations are necessary to make a productive place to live and work
- 2) Resource efficiency. Energy, water, and the dollar should not be wasted.
- 3) Durable, Long Living, Robust, and Loose Fit. Buildings should be able to last, but be adaptable for the future.
- 4) Maintainable, Flexible, and Adaptable.

The following describes different types of green building approaches that can be taken in mills, as well as the grants that can be used to pay for these features.

Building Envelope

The building envelope is everything that makes up the exterior of the building including its roof, walls, windows, and floors. Unfortunately, mill buildings tend to have poor envelopes from an energy perspective, because they have large windows and little if any insulation. As described earlier, even after renovation this can result in extremely high energy costs. Shaffner encourages owners to insulate the exterior walls and roof, because without insulation it is hard to make a comfortable space, regardless of how big the HVAC system is. He says it is sometimes possible to insulate between the brick, but generally he encourages clients to leave only some of the brick exposed, if any. He recommends R20 on the walls and R30 insulation on the roof. If possible, windows should also be replaced with more efficient double or triple pained windows.

Energy Conservation

Energy Star appliances and lighting can also be used in a building. Energy Star is a program of the US Department of Energy and US Environmental Protection Agency. It regulates appliances and lighting and puts the Energy Star logo on products that meet higher energy efficiency standards, compared to what the market offers.

Compact fluorescent light bulbs can also be used. They use one quarter of the amount of energy of conventional incandescent light bulbs. Occupancy sensors and daylighting sensors can also be installed, regulating lighting depending on need.

Heat recovery ventilation units can be used. They operate like normal ventilation fans, however fresh air drawn from the outdoors is heated or cooled indirectly by waste air leaving the building. Therefore, new air entering the building does not have to be heated or cooled as much.

Geothermal heat pumps use groundwater that is generally at 50 degrees Fahrenheit to transfer heat or cooling to the building's HVAC system.

Water Conservation

Water saving devices like low flow showerheads, faucets, and toilets can be used throughout a building.

A greywater system can also be installed in a building. A greywater system collects water from the roof drains. Water is them filtered and stored and later used as needed in the toilets.

For example, a green building in Pennsylvania, was designed so that its 4000 gallon cistern that stores rainwater is located in the building's central atrium. The beautiful wooden cistern is one of the building's architectural and educational focal points. This cistern stores stormwater from the roof, thus decreasing the building's impact on urban stormwater runoff. Once filtered, water is pumped from the cistern to the building's toilets, supplying at least half of the water needed for toilets. Water from the cistern is also used to irrigate plants in the central atrium. For educational value, the pumps and filtration system, located in a glass room adjacent to the atrium, is visible from the atrium, as are interpretive signs that explain the building's water saving approaches.

Healthier and Sustainable Materials

Low VOC glue and paint can be used on a project. This paint and glue has less off gassing, which improves air quality.

Certified wood from sustainable forests can be used. This wood has been grown in a way that is better for the environment.

Recycled building materials can also be used on a project.

Alternative Energy Sources

Hydro Power

Restoring the hydropower systems in mills is a possibility. Quincy Vale, Power House Enterprises, says that the benefit of a hydro system is that "Once you've purchased the capital equipment, you're done. Maintenance costs tend to be small." Once the investment is made, energy is free and better for the environment.

Currently, Quincy Vale is working with the owner's of the Brookside Mill to help them put their hydro power back into production. This project in the town of Westford has 35 residential units of which 10 are affordable. The hydro system is expected to produce at least enough energy to power all the affordable housing units. They may also be able to sell additional energy to an adjacent site.

Alternatives Unlimited will also be restoring the hydropower associated with their mill complex in Whitinsville, Ma. They also decided to restore the old raceways and water turbine, which will create 50 kWatts of power. The hydropower is produced by a dam located directly next to the mill in the Blackstone River. Part of the restoration involves adding 30 inches of flashboard to the top of the dam, which increases the velocity of the water that comes over the dam; replacing or repairing the abandoned turbine under the complex; and restoring the silted tailrace.

Funding is available for hydropower restoration. For example, the Brookside Mill received a grant of \$480,000 from Mass Technology Collaborative to restore their hydropower. This pays for 75% of the actual cost.

However, there are specific regulations associated with hydropower. First, because hydropower effects the river, a number of regulatory organizations are involved in the process. Approvals can take time. For example, the Federal Energy Regulatory Commission has to license the hydro plant, a two year process.

The other regulations are enforced by the electric company. If a building is connected to the power grid, then it uses power from the electric company when it needs it and sells back extra power from the hydro plant, when it does not need it. If connected to the grid, an owner is restricted from producing more than 60 kWatts of its own power. In both these projects, hydro facilities could likely produce more power, but are not able to due to these regulations.

Solar Power

Mill buildings can also use solar panels as an additional source of power. For example, the Alternatives Unlimited mill project will have 9.6 kWatts of solar panels on its roof. Again, funding is available from Mass Technology Collaborative to pay a portion of this cost.

Sustainable Landscaping and Site Planning

Many things can be done outside a building to make it green. Examples of green landscaping include using native plants that require minimal water and maintenance; using water from the greywater system for irrigation; minimizing stormwater runoff from the parking lot; offering parking spaces for bikes; and creating opportunities to enjoy nature. Roof gardens can also provide better insulation and reduce storm water runoff; rain gardens can be integrated with parking areas to recycle water on-site instead of directing it into a storm drain; and trees can be planted along the street and in public areas to improve air quality and reduce the urban heat effect.

Waste Recycling During Construction

Waste created during the construction process can also be recycled. For example, Consigli Contractors were able to recycle between 80-85% of the waste created when they restored the Cambridge City Annex. 129

Similarly Bob Ansin, owner of the Mass Innovation Center, a mill conversion project in Fitchburg, was also able to cut costs early on in the process by salvaging 90% of what he demolished. He was originally told that to demolish a building on-site would cost \$250,000. However, Ansin recognized the value of the beams, bricks, and flooring. Because the project was speculative and no tenant was lined up, he felt was able to take his time with project. He used the parking area as storage for the materials he salvaged.

Conclusion about Green

Renovating a mill in a green way can be more costly upfront, but there is funding to assist with green measures. The long term benefits of green building can be substantial. Green buildings tend to be more affordable to operate, healthier, and more comfortable. They also may be one piece of a puzzle that needs to be filled to attract residents to the mill district.

¹²⁹ McCabe, Todd. Project Executive, Consigli Construction Company. Interview, June 2004

Appendix G. Funding Options

Historic tax credits and affordable housing tax credits will likely be the largest subsidy in a mill conversion project. The details of how these credits work will be discussed below. Other available subsidies may include ¹³⁰:

- Section 108 Loan Program Community Development Block Grant,
 Massachusetts Department of Housing and Community Development
- Housing Development Support Program Community Development Block Grant, Massachusetts Department of Housing and Community Development
- Various Financial Tools, MassDevelopment
- Community Development Action Grant Program, Massachusetts Department of Housing and Community Development
- Various Loans, United State Small Business Administration
- Housing Stabilization Fund, Massachusetts Department of Housing and Community Development
- Housing Innovations Fund, Massachusetts Department of Housing and Community Development
- Massachusetts Preservation Project Fund, Massachusetts Historical Commission

Tax Credits - An Overview

There are two types of federal tax credits, the historic tax credit and the affordable housing tax credit. The historic tax credits are determined by formula and are not very competitive, while the affordable housing tax credits are more competitive and allocation is not as formula driven.

Both types of credits are based on what is the called the project's eligible basis. In the historic tax credit, the eligible basis includes brick and mortar construction costs, construction loan interest, and soft costs. It does not include the costs of acquisition and permanent loan financing. It also does not include site improvements, new construction, and demolition.

Both types of tax credits are sold to corporations for cash. For tax law reasons, the corporations who purchase the tax credits actually have to join the development partnership. The project partnership is often a Limited Partnership. Under this arrangement, the General Partner (usually the developer) owns 1% of the project. They also control the project. The corporation owns 99% of the project. The corporate investor generally joins as a limited partner at the construction loan closing. Federal accounting standards allow general partners to get 99% of the cash flow and 1% of the

¹³⁰ Whitin Mill Site Feasibility Study, Appendix E. Possible Funding Sources.

¹³¹ Starr, Christopher. Principal, WinnDevelopment, Interview, June 2004

¹³² Siergiej, Diane and Rick Lefferts, Commonweal Collaborative. Interview, June 2004

credits. Even though the corporation owns 99% of the project, they only get 1% of its cash flow, but 99% of the credits. 133

It should be noted that one of the nuances associated with affordable housing tax credits is that if direct grants from other sources are received from the federal government, this decreases the eligible basis of the project, which then decreases the available tax credits. As a result, developers using tax credits generally prefer if other types of subsidies are not direct grants, but instead zero percent loans, payable at the sale or refinancing of the property. 134

Historic Tax Credits

The federal historic tax credits are determined by formula. They equal 20% of the project's eligible basis, which includes brick and mortar construction costs, construction loan interest, and soft costs. It does not include the costs of acquisition of permanent loan financing. It also does not include site improvement, new construction, and demolition. The process for applying for historic tax credits is straight forward and not competitive like affordable housing tax credits.

Applying for historic tax credits is a three part process. The entire process requires a \$2500 fee. Part I involves certifying that the building is historic. The building either has to be added to the national historic register or have papers that prove it is on the national register. Part II requires that the building's existing conditions are documented with photos and plans. Part II also requires the submission of plans for rehab. The Massachusetts Historic Commission has the right to review Part I and Part II for a period of thirty days. The application is then passed to the Federal Parks Service which also reviews the application for 30 days. If both organizations approve the application, construction can begin. To receive approval, these organizations will likely require some modifications to the project scope. Once Part II is approved, if there are changes during construction, an amendment must be submitted to both organizations for approval. 137

After construction is complete, prior to receiving a certificate of occupancy, the Part III application is submitted. This application includes a documentation of construction that was done, a confirmation that restoration efforts approved in Part II were completed as expected, and photos of the completed project. It takes at least 60 plus days to receive this approval. 138

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¹³³ Starr, Christopher. Principal, WinnDevelopment, Interview, June 2004

¹³⁴ ISIP

¹³⁵ ISIP

¹³⁶ Siergiej, Diane and Rick Lefferts, Commonweal Collaborative. Interview, June 2004

¹³⁷ ISIP

¹³⁸ ISIP

Historic Tax Credits Design Issues

There are a number of design issues that come up with historic tax credits in mills. For example, finding appropriate window replacements or repairing windows is critical. The Federal Parks Service also prefers that brick be exposed, but they do not want them to be sandblasted because that deteriorates the brick. Some of this requirements can be expensive and in conflict with other project objectives. For example, owners are required to repair windows, and only if they are beyond repair, replace windows with replicas. To adhere to this standard generally costs about \$10,000 per unit for windows, whereas in new construction windows only cost about \$1000 per unit. Leaving the brick exposed in the interior is also preferred. However, energy costs can be substantial. HUD may also have certain overriding energy requirements if a building is also going to use affordable housing tax credits.

Federal Low-Income Housing Tax Credits

Low-Income Housing Tax Credits are highly competitive and complex. They require that either 20% of residents are below 50% of state median income or 40% of residents are below 60% state median income. The amount of credit is based on 40% of the cost of the affordable units.¹⁴¹

It generally takes at least six months to a year to be awarded the affordable housing tax credits. Developers almost always have to compete for several rounds before receiving an award. Developers can apply twice a year. Once the affordable housing tax credits are in place, the developer is ready to move from schematics to the design development phase and the contract can be bid. 143

One of the conflicts of creating loft style units when using affordable housing tax credits is that regardless of the square foot size of the loft, if bedrooms are not defined, the developer will get a smaller subsidy, because the unit is considered a studio. Larger subsidies are available for each additional bedroom.¹⁴⁴

Affordable housing tax credits can also not be used to create artist live/work space, geared exclusively to artists. As Rick Lefferts from Commonweal Collaborative explained, "The State hasn't bought into artist space being worth it." To work around this issue, Lefferts recommends that artist studio space be put in the commercial space on the building's ground floor. Artists could live in the building, and would be able to apply for low income housing like anyone else. 145

 142 ISIP

¹³⁹ Russell, Hugh. Principal, Russell, Scott, Steedle, and Capone. Interview, June 2004

¹⁴⁰ Siergiej, Diane and Rick Lefferts, Commonweal Collaborative. Interview, June 2004

¹⁴¹ ISIP

¹⁴³ ISIP

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¹⁴⁵ Siergiej, Diane and Rick Lefferts, Commonweal Collaborative. Interview, June 2004

Assistance

A developer should apply for credits when they have site control, zoning is in place, and schematic plans. Lenders should have a stated level of interest in the project, but full commitment is not necessary for the application. The developer should also have completed financial proformas.¹⁴⁶

Consultants are available who can assist developers in applying for tax credits and finding funding sources. Diane Siergiej and Rick Lefferts of the Commonweal Collaborative, a historic tax credit consultant, were interviewed for this report. They recommended that developers contact them as early in the process as possible. From day one, a consultant team can provide a general assessment of what resources are available for the building. They should also be involved in the design process because they have a good sense of what is and is not acceptable from a historic tax credits perspective. Part of their involvement in the design process is them trying to create solutions for the different physical requirements of different subsidies, such as affordable tax credits and historic tax credits.

Generally this consultant service will cost a developer of a mill \$30,000 or more. ¹⁴⁷ Jim Sperling, Mass Mill's lawyer, also recommends that developers hire architects who are familiar with historic buildings and tax credits. He says architects can offer a more realistic perspective of how to apply the historic standards. He also recommends finding a lawyer who is familiar with credits.

Syndication

Syndicators who buy tax credits tend to work directly with the tax credit consultants. Tom Maxwell, principal at MMA Financial, LLC, syndicators for tax credits, was interviewed for this report.

The first step in any syndication deal is for the syndicators to complete thorough due diligence of the project. This is similar to what a bank will do before giving a developer a loan. The firm has to look over everything with a fine tooth comb to make sure the economics of the deal work. This is because for the tax credits to be viable, the project has to be completed and held under the same ownership for at least five years if historic credits are used, and at least 15 years if affordable tax credits are used. Also, if the project fails, MMA Financial has the first right to take over and manage it.¹⁴⁸

MMA Financial reviews all the documents related to the project to make sure it will be a success. They review tax credit applications and proformas. They review plans and specs, the construction contract, general contractor qualifications, historic consultant qualifications, the market analysis, the environmental report, and operating expenses. Their engineering consultant reviews all the construction documents to make sure the

¹⁴⁶ Siergiej, Diane and Rick Lefferts, Commonweal Collaborative. Interview, June 2004

¹⁴⁷ ISIP

¹⁴⁸ Maxwell, Tom. Principal, MMA Financial, LLC. Interview, June 2004

project works and is priced appropriately. They also make sure that the product meets the market demand. They also check that the project's cash flow will meet expenses, once the building is in operation. 149

Evaluating the schedule is also part of the due diligence. If the project is not completed on time and tax credits are delayed a year, this can have very detrimental effects to the investors who are counting on those credits for a specific fiscal year. As a result, the developer faces a stiff penalty, if the certificate of occupancy is delayed. Generally speaking, the calendar year in which the certificate of occupancy is issued is the calendar year in which the credit is received. ¹⁵⁰

After due diligence is complete and the project looks like a go, the syndicator requires some guarantee of completion by the developer. The guarantee may come from a number of sources. The developer may personally guarantee the project. This guarantee is backed up by the developer's other projects and the developer's net worth. If this is one of the developer's first projects, then Tom Maxwell says that they "care about how much money is in the deal." He says that MMA can feel comfortable going ahead with a deal if the projections look right and there is a "buffer." For example, if the developer's fee is high enough and the project still works, Maxwell feels confident that if the project is struggling, money can come from the developer's fee. 151

After due diligence is completed, the syndicator, representing the interests of the corporate investors, puts together a proposal letter to the developer. Generally they will offer the developer \$0.90 to \$0.92 on the dollar for federal tax credits. Among other things, this letter breaks down the payout structure for the tax credits based on benchmarks. A portion of the payout is given during construction and then at a few other stages in the process. It is also usually arranged that developers will not get their fee until the project is complete and fully leased and stabilized for three months. Again, achieving these benchmarks is important to the syndicator because they help guarantee that the project will be a success, which is crucial to the viability of the tax credits. ¹⁵²

Once everything is in order, to cash out the tax credits, a limited partnership needs to be created between the developer and the investors. This partnership is generally formed when Part I and Part II of the historic tax credits have been approved by the appropriate agencies. However, some developers have such high net worth that investors are willing to take the developer's guarantee and will make a commitment before these stages have even been approved. The partnership must be formed prior to when the certificate of occupancy is issued, because owners cannot change ownership for a specific period of time (five years for historic tax credits and 15 years for affordable tax credits) after the certificate is issued. 153

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¹⁴⁹ Maxwell, Tom. Principal, MMA Financial, LLC. Interview, June 2004

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¹⁵² ISIP

¹⁵³ ISIP

Appendix H. Parking Options

When speaking with different mill owners in Lawrence and others familiar with the area, parking almost always comes up as a barrier to redeveloping the mills. To address this issue, parking solutions for various mill projects are described. In addition to these options, a public/private parking solution should be considered. In Lawrence, most mills in the mill district have extremely limited parking. Sharing the burden of parking between a few developers and the city, may prove more economical, especially given the limited space at the mills.

Under this scenario, mill owners can partner with the city to create a municipal parking structure in close proximity to the mills. Public funding may be able to pay for the bulk of the cost of these facilities and developers could pay a fee for the remainder of the cost. In combination with the new parking that comes out of the Gateway Project, this may prove to be the most cost effective solution and begin to alleviate some of the parking stress that is stalling mill redevelopment projects. From an aesthetic perspective, a few tastefully designed structural lots with ground floor retail in strategic locations could help the mill district retain its historical character, as well. This could be a more appealing alternative to having many parking lots and structures at each mill that could over power the district. Ground floor retail could also add life, filling in some of the physical gaps that exist in the urban fabric.

Option 1. No Parking/ Municipal Parking

The Boston Machine Lofts has no parking associated with it and instead encourages residents to use an adjacent municipal lot. An unsecured, at grade municipal parking lot is located behind the building, and residents pay the city between \$30 to \$75 per month to park there.

The developer believes that the project succeeds even without parking, because of the clientele. Residents tend to be what he calls 'urban pioneers'. He says they are willing to take a risk with no designated parking, even in a neighborhood that may not be considered the best in town. ¹⁵⁴

Option 2. Municipal Parking, Leased Parking, and On-Site Parking

The Boott Mill project uses a combination of on site parking, leased parking, and municipal parking to solve its parking needs. It has room for only eight parking spaces directly adjacent to the mill. Winn considered parking on the lower floor of the building. However, estimates for this amenity came in at the exorbitant price of approximately \$10 million dollars. This price was high because columns would have had to be moved and the area would have had to be stabilized.

 $^{^{\}rm 154}$ Bailly, Henri-Claude. Principal, Resource Capital Group. Interview, June 2004

Prior to closing, they came up with another solution to achieve a 1 to 1 parking ratio within 1000 feet of the project. They negotiated an 80 year lease for 52 parking spaces in close proximity to the mill. They also negotiated a long term lease with the city of Lowell for spaces in the municipal lot. This structured municipal lot is within 319 feet of the project. This is one of four parking garages the city has invested in during the last few years. Starr says, "From an economic development standpoint, the garages are one of the best investments the city could have made." 155

Option 3. Parking Structure within an Existing Mill

In 1990, the Mullins Company considered gutting the interior of one of their mill in the Mass Mills complex and building a parking structure. The structure would have occupied the 90' x 120' building and would have been composed of an internal structure of continuously spiral stacked parking garage. This proved to be financially infeasible. It would have cost them \$15 million, or the equivalent of \$15,000 -\$20,000 per car, in 1990 dollars. ¹⁵⁶

Although this option is likely to be structurally feasible, it is probably infeasible in Lawrence for a single owner from a financial perspective. However, this type of project may be possible, if the city and developers collaborate to create a municipal parking facility as described above. Converting the Lincoln Foods building, for example, into a structured parking lot may be one possibility for this type of project. It would retain the historical exterior character of this building, which is a community asset, while solving part of the parking problem. It will also create a new use for a building which is difficult to renovate for other purposes because of its large floor plate and low ceilings.

Option 4. Ground Floor Parking in a Mill

The Mullins Company is planning to use the first floor of two of their mill buildings for parking at Mass Mills. In one instance they will be using the first floor of the Knapping Building for parking. This building is 60 feet wide with a nine foot width between columns, an ideal dimension for parking. This floor will be able to fit 46 spaces of parking.

They are also taking the first floor of mill three and converting it to parking. The 8 foot on center column widths are not as ideal for parking, but the building will fit 100 rather tight parking spaces. Although they considered moving some of the columns to make more room for the cars, this proved cost prohibitive. To make the building structurally sound for the weight of the cars, they will be filling the crawl space underneath the first floor with 10,000 cubic yards of sand. Filling the crawl space only costs \$300,000, while restructuring the first floor would have cost \$500,000. Because historic regulations do not allow levers on the exterior of the buildings, the parking will be ventilated using natural ventilations from the windows. The windows on the garage will be on carbon

¹⁵⁵ Starr, Christopher. Principal, WinnDevelopment, Interview, June 2004

¹⁵⁶ Russell, Hugh. Principal, Russell, Scott, Steedle, and Capone. Interview, June 2004

monoxide sensors and will operate electronically. Exhaust fans will also go through the roof. 157

Option 5. One Level Parking Decks – What's Allowed Historically

Diane Siergiej and Rick Lefferts of the Commonweal Collaborative, a historic tax credit consultant, say that from a historic perspective it is possible to build a parking deck over an existing parking lot, even if the parking deck is next to a historic mill building. Although this would block some of the view to the building, they felt that it would likely be acceptable from a tax credits perspective, because it is new construction and would not touch the existing building. It would however need to be compatible with the existing mill. For example, if it had a utilitarian look, it would be in keeping with the historic function of the original mill complex. 158

Option 6. Demolition

In the first phase of the Mass Mills project, Hugh Russel, Mass Mills architect, explained, "We demolished enough to make room for parking." Approximately 327,000 square feet were demolished to create a parking ratio which is still only 1:1. 159 Although at the time this proved to be the only way to make the deal work, this solution means historic mill buildings are forever lost. This is especially disappointing if these buildings prove to be more valuable in the future and it would have made more economic sense to keep them and build an adjacent structured parking lot.

Russell, Hugh. Principal, Russell, Scott, Steedle, and Capone. Interview, June 2004
 Siergiej, Diane and Rick Lefferts, Commonweal Collaborative. Interview, June 2004
 Russell, Hugh. Principal, Russell, Scott, Steedle, and Capone. Interview, June 2004

Bibliography

Interviews

Alexander, James. Finegold Alexander + Associates, Inc. Interview, June 2004

Algona, Michael. Engineer. Interview, June 2004

Ansin, Bob. Mass Innovations Center and Wood Mill Owner and Developer. Interview, June 2004

Bailly, Henri-Claude. Principal, Resource Capital Group. Interview, June 2004

Balcom, R. Lee. SOHAR. Interview, June 2004

Bolduc, John. Environmental Planner, City of Cambridge Community Development Department. Interview, June 2004

Faust, Fred. President, EdgeGroup Inc. Interview, June 2004

Gill Case, Peter. President of Truth Box Architects and Seven Stone Building Group Inc. Interview, July 2004

Graziano, Jennelle. Realtor, Coco, Early, and Associates. Interview, June 2004

Harol, Kristen. Deputy Director, Lawrence CommunityWorks. Interview, June 2004

Ingersoll-Mahoney, Phillip. Director of Administration and Finance, Alternatives Unlimited, Inc. Interview, June 2004

Kozol, Lisa. Director of Acquisitions, Lawrence CommunityWorks. Interview, June 2004

Kotelchuck, Tamar. Project Manager, Lawrence CommunityWorks. Interview, June 2004

Lyons, Paul. Zapotec Energy Consulting and Engineering Services. Interview, June 2004

Malenfant Paden, Elizabeth. Associate Land Use Planner, City of Cambridge Community Development Department. Interview, June 2004

Maxwell, Tom. Principal, MMA Financial, LLC. Interview, June 2004

McCabe, Todd. Project Executive, Consigli Construction Company. Interview, June 2004

McCamant, Kathryn, Cohousing Company. Interview, April 2004

McGrath, W. Tod. President, AdvisoRE, LLC and Lecturer, MIT Center for Real Estate. Interview, July 2004

Mullins, Joseph. President, Joseph R. Mullins Company. Interview, June 2004

Paley, Marianne. Executive Director, Groundwork Lawrence. Interview, June 2004

Roth, Peter. President of New Atlantic Development and MIT Center for Real Estate Lecturer. Interview, July 2004

Russell, Hugh. Principal, Russell, Scott, Steedle, and Capone. Interview, June 2004

Ryan, John. Development Cycles. Interview, April 2004

Schaffner, Christopher. Associate, ARUP. June 2004

ScottHanson, Kelly. Cohousing Resources, LLC. Interview, April 2004

Sidell, Chester. President, KGR. Interview, June 2004

Sidell, Gary. Vice President, KGR. Interview, June 2004

Siergiej and Rick Lefferts, Commonweal Collaborative. Interview, June 2004

Sperling, James D. Attorney, Rubin and Rudman, LLP. Interview, June 2004

Starr, Christopher. Principal, WinnDevelopment, Interview, June 2004

Super, Maggie. Groundwork Lawrence. June 2004

Torres, William. Property Manager, Museum Square. Interview, June 2004

Vail, Quincy. Power House Enterprises. Interview, June 2004

Ye, P. Deborah. Sales Agent/Research Assistant, The EdgeGroup. Interview, June 2004

Literature

Alternatives Unlimited, Inc. Whitin Mill Site Feasibility Study, 2004

Brenton, Maria, <u>We're in Charge : Cohousing Communities of Older People in the Netherlands : Lessons for Britain, Policy Press : the Housing Corporation, 1998</u>

Building Blocks in Lawrence, Boston Sunday Globe, September 21, 2003

Butler, <u>Britta. ReWorking the City of Workers: A New Housing Paradigm for the Immigrant City.</u> MIT Master's Thesis, 2003

Case, Karl E. and Christopher J. Mayer, "The Housing Cycle in Eastern Massachusetts: Variations among Cities and Towns." New England Economic Review, March/April 1995, pp. 24-40

Case, Karl E. and Robert J. Shiller, "Is There a Bubble in the Housing Market?" Brookings Papers on Economic Activity, 2:2003

Charter, Martin and Michael Polonsky, <u>Greener Marketing</u>. Greenleaf Publishing, 1999

City of Lawrence, Massachusetts. <u>Application for the Brownfields Economic</u>
<u>Redevelopment Initiative Demonstration Pilot, Lawrence Gateway Project, Lawrence,</u>
Massachusetts. November 16, 1995

Cohousing Network Website, www.cohousing.org, 2004

England, Krystal. Thesis Reference to Boston Redevelopment Authority. "Artist Live/Work Specific Design Guidelines." BRA, June 19, 2003

England, Krystal. New Space for Living and Working in the Creative Economy. MIT Thesis, 2004

Delgado, Manuel E. <u>Spicket River Greenway Project, Lawrence, MA: teaching & learning design with the community</u>. MIT Thesis, 2001

Grogan, Paul S. and Tony Proscio. <u>Comeback Cities, A Blueprint for Urban</u> Neighborhood Revival. Westview Press, 2000

Hanson, Chris, <u>The Cohousing Handbook : Building a Place for Community</u>, Hartley & Marks Publisher, 1996

Lawrence CommunityWorks. <u>Our House Nuestra Casa, Family Learning Center Flyer</u>, 2004

Lawrence CommunityWorks. <u>People and Place, Individual Development Accounts, Technology and Community Revitalization Flyer, 2004</u>

Lawrence CommunityWorks. <u>Some Good Things to Know About Lawrence Community</u> Works Flyer, 2004

Lawrence Community Works and MIT Department of Urban Studies and Planning. Reviviendo Gateway Initiative website, www.avencia.com/lcw, 2004.

McCamant, Kathryn, <u>Cohousing: a Contemporary Approach to Housing Ourselves</u>, Ten Speed Press, 1994

National Center for Small Communities Website, http://www.natat.org/ncsc/pubs/newsletter/Oct2001/Article2.html, 2004

Ray, Paul and Sherry Ruth Anderson. <u>The Cultural Creatives, How 50 Million People Are Changing the World</u>. Three Rivers Press, 2000

Soule, David, and Joan Fitzgerald, Barry Bluestone. <u>The Rebirth of Older Industrial Cities: Exciting Opportunities for Private Sector Investment</u>. Center for Urban and Regional Policy, Northeastern University, April 2004

VHB/Vanasse Hangen Brustlin, Inc., Rojas Associates, Inc., RKG Associates, Inc., American Trucking Association Foundation, Tremont Preservation Services. Merrimack Corridor Enhancement Project, Final Report. Submitted to City of Lawrence Office of Economic Development, February 4, 1998