Historic Mills and Cultural Industries: A Two-Pronged Approach to Revitalization

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ABSTRACT

Decades past deindustrialization, former industrial centers across Massachusetts are committed to preserving and transforming historic mills. A variety of adaptive reuse projects spearheaded by cities and redevelopers alike have contribute anew to the area's diminished economy. Yet many mill towns and cities are still grappling with the question of how, exactly, to reanimate these massive buildings. At the same time, arts and culture-related strategies for economic development have continued to gain ground both locally and abroad. While artists have been known to gravitate towards deteriorating industrial building stock for its relative affordability and unique physical characteristics, planners and policy makers can also strategically support the development and sustainability of cultural facilities in historic mills as part of culture-led regeneration efforts.

This thesis addresses the relationship between historic preservation and the cultivation of cultural industries. Drawing upon six case studies of arts and culture-focused adaptive reuse in Lowell and Lawrence, Massachusetts, this study identifies the variety of challenges mill redevelopers face in creating cultural facilities and the range of strategies they deploy to achieve success. It also addresses the role of local government as a critical supporter of these types of projects, and derives lessons for city officials, developers, and other local stakeholders on how to advance the complementary goals of historic preservation, support of cultural industries, and economic and community revitalization. This paper argues that the adaptive reuse of historic mills and cultural industry development are complementary strategies for economic and community revitalization that city officials should actively pursue by establishing plans, policies, and programs to facilitate the redevelopment of these industrial and historic landmarks.

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ABOUT THE AUTHOR

With a deep interest in the ways in which the arts can work together with urban planning and policy to improve communities, Chelsea enrolled in MIT's Master's of City Planning program after five years of working with artists, museums, and other cultural organizations across America and internationally. Prior to arriving at MIT, Chelsea lived in Jakarta, Indonesia, where she helped to launch the country's first contemporary art museum (Museum MACAN) as the museum's Head of Communications and Development. Before Museum MACAN, Chelsea worked for three years in New York as a consultant to many of the world's leading cultural institutions, including SFMOMA, Park Avenue Armory, The Apollo Theater, The New Orleans Museum of Art, and the U.S. Pavilion at the Venice Biennale.

Over the past two years at MIT, Chelsea focused on Housing, Community, and Economic Development, and also completed the Urban Design certificate in MIT's Department of Urban Studies and Planning. Concurrently with her studies, she worked as a freelance consultant for a range of clients at the intersection of urban planning and policy, social justice, and the arts. Chelsea also held positions with The City of Boston's Mayor's Office of Arts and Culture, MIT's Community Innovators Lab, the MIT List Visual Arts Center, and the Center for Urban Pedagogy. She holds a Bachelor of Arts from Northwestern University in Communication Studies with a specialization in Art Theory & Practice.

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OVERVIEW OF CHAPTERS

This thesis begins with an introduction that explains the relationship between historic preservation, adaptive reuse, and cultural industries for economic and community development, providing context for the main focus on six mills-turned-cultural facilities in Lowell and Lawrence, Massachusetts. In chapter two, I provide more detailed background on two main topics related to my research: mill revitalization in postindustrial cities, and arts and culture-focused economic development. I also provide definitions of key terms that will be used throughout the thesis. Chapter three provides context for the case studies through an overview of Lowell and Lawrence's histories with a focus on recent planning efforts and related city policies that have impacted the adaptive reuse of historic mills into cultural facilities. Using public documents such as plans and zoning codes, I show that city officials in Lowell have strategically guided the reuse of their mills in support of cultural industries, while Lawrence's culture-focused mill redevelopment projects have been more the product of an engaged community of non-profits and philanthropically-minded citizens.

Following the overview of Lowell and Lawrence's city planning contexts, the next two chapters provide an in-depth description of the six mills-turned-cultural facilities in Lowell and Lawrence. Chapter four describes the adaptive reuse projects in Lowell, including the Appleton Mills Apartments, Western Avenue | Studios & Lofts, and Mill No. 5. Chapter five examine three cases in Lawrence, including The Island Street Studios at Union Crossing, the mill at 56 Island Street, and the mill at 250 Canal Street. With a primary focus on the mill owner's perspective, these case studies aim to provide details about the project's history, the owner's decision-making process, strategies for redevelopment, and financial considerations.

In chapter six, I analyze the six adaptive reuse cases altogether to glean whether and how the involvement of government officials has impacted the ability of these projects to be successfully completed, and to identify other relevant patterns that have affected the creation of cultural facilities in historic mills. I conclude that different types of mill redevelopers, including public-private partnerships, community development corporations, and independent mill owners, face similar obstacles related to the physical mill building, funding, and the creative tenants when adapting their mill into cultural facilities. I argue that resources provided by city and state government are a main factor influencing the mill redeveloper's approach to problem-solving and relative ability to solve different problems. Often the distinct types of mill redevelopers have different levels of influence on and access to government officials.

The patterns that emerge from the case studies suggest ways in which government officials can provide more support for the strategic combination of the historic preservation of mills and the development of cultural industries. Accordingly, this thesis concludes with a set of policy recommendations for government officials, a separate set

of recommendation for mill owners and developers, and a final set of recommendations for artists and supporters of the arts.

CHAPTER 1: INTRODUCTION

During the 18th and 19th centuries America's economy was completely transformed by the industrial revolution, with profound impacts on the greater New England region and Massachusetts in particular. After textile mechanic Samuel Slater opened the first American factory in 1790 in Pawtucket, Rhode Island, many businesspeople followed suit, and soon New England became home to hundreds of mill towns scattered across the region, with upwards of 45 sited in Massachusetts. Following the Great Depression and the World Wars, orders for munition and textiles dropped drastically, and factory owners began to move their production to the American South and overseas to save money. By the 1970s, factory-based employment in these industries fell to a small fraction of what they had been, causing populations in these towns to decline and poverty rates to rise.[i]

In addition to a host of other problems, deindustrialization has left behind an abundance of old, often massive and contaminated mill buildings in cities and towns across Massachusetts that government officials are still trying to figure out what to do with. Because these physical structures were once so vital to everyday life— providing jobs as well as a sense of community—residents still value these buildings and by and large, have fought to preserve them. [ii] Though a couple of decades ago leading wisdom advocated for the removal of mill buildings, the historic preservation and adaptive reuse of mills has come to be seen by many government officials as an economic development strategy that is part and parcel of the creative placemaking movement.[iii] These policymakers often believe mill preservation contributes to a city's sense of identity in ways that affect residents' sense of well-being *and* attracts tourism dollars. For this reason, among others, many cities are committed to finding politically and financially feasible solutions to reanimate their mills for a variety of new uses that can better serve the needs of current residents and contribute anew to the area's diminished economy.[iv]

At the same time as many cities continue to face the challenge of how to reuse their industrial building stock, the arts and culture sector is receiving greater attention from government officials as an economic and community development strategy. In addition to increasing tourism, cultural industries can also provide new job opportunities, as well as an enhanced quality of life for residents.[v] The development of cultural facilities—including spaces for both the production and consumption of the arts such as artist studios and live/work housing, performance venues, arts education centers, and art galleries—can all be important elements of communities, and are often suitable tenants for underutilized mill space.

However, there is currently a dearth of cultural planning literature that links the goals and considerations of historic preservation and adaptive reuse with the process of developing cultural facilities. This thesis explores the critical role that mill redevelopment can play in support of the growth of local arts and cultural activities. It addresses the relationship between historic preservation, adaptive reuse, and cultural facility creation, seeking to identify strategies that build on existing mill redevelopment policies to promote a dual approach to economic and community development for local governments.[vi]

Artists and Industrial Building Stock

Aside from top-down strategies that foster the adaptive reuse of old mills into cultural facilities, artists and makers have long been known to gravitate towards industrial buildings for their affordable rent, large floor-plates and windows, high ceilings, and permissive use policies. Yet, in a trend that has come to be known as "the artist displacement cycle," artists' presence typically portends renewed development interest in a place that can result in creative tenants being pushed out of their studios and toward the next closest economically depressed city with similar types of space.[vii]

In Massachusetts, this cycle has been playing out predictably.[viii] Though Boston still has some industrial building stock, real estate pressures have caused many of the city's artists to move to surrounding areas such as Cambridge and Somerville. In line with the cycle, as Cambridge and Somerville become increasingly developed and either tear down or turn much of their formerly industrial space into higher priced apartments or offices, artists are increasingly looking to postindustrial cities further afield. Many of these postindustrial cities have caught on to the trend, and are now strategically vying to attract priced-out artists to stimulate their cultural economies.[ix] While some culture-focused development projects are strategically propelled forward by government, such as in Lowell, others happen more organically, with artists finding and renting cheap space where they can find it. Whether developed from the top-down or bottom-up, the Massachusetts mill towns of Lowell, Lawrence, North Adams, Easthampton, Fall River, Housatonic, Holyoke, Chicopee, Waltham, and Northbridge all have cultural facilities of various types and sizes housed in historic mill buildings.

MASS MoCA, Iconic Example of Historic Preservation and Cultural Industry

The Massachusetts Museum of Contemporary Art (MASS MoCA) in North Adams provides a prime example of the ways in which government officials have partnered with local actors to reuse iconic industrial buildings and invest in arts and culture as a strategy for revitalization. Now the nation's largest contemporary art complex, MASS MoCA took over the 530,000 square foot complex that formerly housed Sprague Electric's operations and its 4,000 local workers. According to a 2017 economic impact study conducted by economist Stephen Sheppard in 2017, the museum is credited with directly creating 586 jobs and stimulating almost $51 million in economic activity in the area that year.[x] However, the museum has also been widely criticized for falling short of expectations, as job growth has lagged behind initial projections, North Adams' poverty rate remains one of the worst in Massachusetts at 18%, and many storefronts downtown remain empty.[xi]

Much has been written about MASS MoCA's successes as well as its shortcomings, and the project has already inspired three documentary films. Along with all of the publicity has been a question about replicability— can other struggling towns use North Adams' strategy and turn their factories into art meccas?[xii] While there are many lessons that can be applied from North Adams' story to other postindustrial centers, such as the importance of public-private partnerships, as well as vision and tenacity in leadership, it is equally important to recognize the factors that make this case exceptional. North

Adams is located in Berkshire County, a largely rural and mountainous area just a few hours' drive from either New York City or Boston. While the county overall grapples with severe poverty issues, it is also known as a cultural hub (and home to famed cultural and academic institutions) and an area for wealthy urbanites' country houses.[xiii] These factors played a large role in MASS MoCA's genesis, since the idea for the museum was first pitched by the leaders of the Williams College Museum of Art, and the large arts-focused philanthropic community in the Berkshires donated millions to the cause. Another incredibly significant factor of success was the more than $60 million in state funding the project has received over the past 30 years.[xiv]

While many of the 45 mill towns across Massachusetts are still struggling to reactivate their mills and boost their economies, the story of MASS MoCA suggests that not every community will be able to support the transformation of a large factory into a contemporary art museum. It also illustrates that the arts are not a silver bullet for solving postindustrial woes. However, this does not mean that the arts and culture sector is any less crucial for planning and revitalization efforts. While a cultural project of MASS MoCA's magnitude may not be feasible nor desirable for every mill town, it is important for city stakeholders to understand the range of cultural strategies that could contribute to economic and community development.

Many municipalities in Massachusetts seem to understand this point, and an informal survey of cities and towns across the state reveals that places such as Lowell, Holyoke, Easthampton, Fitchburg, and New Bedford have created cultural plans for economic and community development. However, while all of these cities have historic mills, only Lowell, Holyoke, and Easthampton make clear in their plans an explicit connection between their support of the cultural economy and their land use plans for mills. This paper argues that the adaptive reuse of historic mills and cultural industry development are complementary strategies for economic and community revitalization that city officials should actively pursue by creating plans, policies and programs in support of them.

Lowell and Lawrence: The Sites of the Case Studies

Lowell and Lawrence are two postindustrial cities in Massachusetts that have a stake in both historic preservation and the cultural industries as strategies for economic and community revitalization. Both Lowell and Lawrence were instrumental in the American Industrial Revolution, and were two thriving centers of textile manufacturing until the end of World War Two. Now, as two of the 24 Massachusetts cities named "Gateway Cities" by state legislators, to different degrees they are known as "struggling regional economic centers."[xv] According to the definition of a "Gateway City" they both also have a population between 35,000 and 250,000, a median household income and a per capita income below the statewide average, and a rate of educational attainment of a bachelor's degree or higher that is below the state average.[xvi] Beyond this designation and their demographic similarities, Lowell and Lawrence are also both approximately 30 miles north of Boston, have access to public transit which enables commuters easy access to the state's largest city, and have millions of square feet of mill space protected under historic preservation laws.

Despite their similarities, Lowell and Lawrence have two very different political contexts, and they are at different points on the path to economic recovery. Lowell is often held up as a model for culture-led regeneration strategies and a pioneer in the way the city intentionally planned for the growth of its cultural economy and linked that to vacant mill space.[xvii] Known for the Lowell National Historical Park, which was born out of a public-private partnership in the 1970s, the City has had the benefit of strong government leadership, access to significant state and federal funding, and a capable nonprofit sector that has nurtured the arts and culture sector along with other economic drivers. Lowell has since preserved and redeveloped 98% of its mills, many of which include cultural facilities.

Lawrence, on the other hand, has had a more difficult time bouncing back from the decline of the textile industry. While the city has succeeded in retaining some of its manufacturing roots, it continues to seek additional strategies for redevelopment to make up for the difference. While the city's government has been a notoriously weak institution, the election of Mayor Dan Rivera in 2013 has been a cause for optimism as key indicators for the city's economic health have improved during his tenure.[xviii] The City of Lawrence has generally taken a laissez-faire attitude to its mill redevelopment, which has allowed for artists, makers, and other creative workers to take up residence in its mills more organically. While there is not adequate data available on Lawrence's historic mills, a site visit to the city and interviews revealed that there is still ample vacant and underutilized mill space. However, recently Lawrence has seen a wave of development that has transformed many mills into housing, with other similar plans in progress.

The Six Culture-Focused Adaptive Reuse Projects in Lowell and Lawrence

This thesis examines six case studies of mill redevelopment in Lowell and Lawrence that have resulted in the creation of cultural facilities. With a focus on the perspectives of the mill owners themselves, this study explores the variety of challenges that different types of mill redevelopers face in the process of creating cultural facilities and the range of strategies they deployed to achieve success. In this context, "success" is defined by the cultural facility being created and open for use by tenants. Of the six cases examined in this study, three are in Lowell, Massachusetts and three are in Lawrence, Massachusetts.

The three cases examined in Lowell include:

- *The Appleton Mills Apartments:* Features 130 affordable artist live/work apartments and millWORKS art gallery. This project was developed by a public-private partnership between the City of Lowell and Trinity Financial.
- *Western Avenue | Studios & Lofts:* Features 250 artist studios and 50 live/work apartments, the Onyx Room Performance Space, the Loading Dock Gallery, and brewery/taproom Navigation Brewing Co. This project was developed by independent mill owner Karl Frey.
- *Mill No. 5:* A mixed-use community gathering space that includes multiple spaces for the performing arts, The Luna Theater, and various artisanal retail shops and

food and beverage establishments. This project was developed by independent mill owner Jim Lichoulas.

The three cases examined in Lawrence include:

- *Island Street Studios at Union Crossing:* Features 26 work-only studios and a dance studio as part of a larger mixed-use residential and commercial complex. This project was developed by local community development corporation Lawrence CommunityWorks.
- *The mill at 56 Island Street:* Houses community art center Essex Art Center, non-profit theater group Acting Out! Theater Company, a few work-only artist studios, and a brewery/taproom in development. This project was developed by independent mill owner Gary Sidell and his late father Chet Sidell.
- *The mill at 250 Canal Street:* Home to Blochaus Gallery and artist collective, and many other work-only artist studios. This project was developed by independent mill owner Michael Broomfield.

Audience and Goals

This thesis is written for three main audiences who may wish to support the redevelopment of historic mill buildings for the development of cultural industries:

- Local government officials
- Mill owners and redevelopers
- Artists, makers, and supporters of the cultural industries

This thesis is the result of conversations with many different parties who have succeeded in adapting historic mills in Lowell, Lawrence, and other parts of Massachusetts for arts and cultural uses. Armed with their valuable insight, this thesis examines both the challenges that different types of developers have faced, and the key strategies that they used to support the process of siting cultural facilities within historic mills across Massachusetts. An explanation of the key audience groups and relevant goals follows below.

Local Government Officials

Local government officials who develop plans, policies, and programs for both historic preservation and support of cultural industries are critical to the success of many culture-focused mill redevelopment projects. Through comprehensive master plans, zoning amendments, and tools such as financial incentives and subsidies, local governments and related nonprofit organizations provide crucial support for developers creating cultural facilities in historic mills. If cities own historic mill buildings, they can also set up public-private partnerships to carry out these types of projects. This thesis can be used as a tool for local government officials and nonprofit leaders in Lowell, Lawrence, and other Massachusetts mill towns to:

- Learn from the perspective of mill owners who have created cultural facilities to gain insight on the challenges they faced and the strategies they used for success;
- Better understand how the public sector can support this type of development;

- Become informed about the complementary role that historic preservation and the arts and culture sector can play in economic and community development.

Mill Owners and Redevelopers

Mill owners are often the most important players in the mill redevelopment process. Without their decision to act, most historic mills in a city will either remain unchanged or deteriorate—with the latter being a lead cause of city government decisions to take over properties. Mill owners hold the primary responsibility for their building and are most often the day-to-day managers of adaptive reuse projects. Thus, they are some of the people most familiar with existing support systems and aids to the mill redevelopment process as well as any pain points. This thesis can be used as a tool for mill owners to:

- Better understand how to approach the development of cultural facilities in their mill buildings, including through community engagement efforts and user-led design practices;
- Learn from strategies that other mill owners have used to reduce the financial cost of such mill redevelopment projects, and ways to cross-subsidize less profitable tenants;
- Become aware of the ways in which government and nonprofits can support such projects to either access or advocate for resources.

**A note about terminology: mill owners are often private individuals or families, but can also be community development corporations or real estate development companies, or the city itself. Often times, independent mill owners might also be the people who redevelop the property. For simplicity, the term "mill owner" covers all such scenarios, unless otherwise specified.*

Artists, Makers, and Supporters of the Cultural Industries

While the primary focus of this paper is on mill owners and government officials by virtue of a focus on process instead of outcome, the findings shed light on the importance of community participation in mill redevelopment projects. The outcomes of multiple projects described in this thesis were vitally affected by a group of engaged artists, makers, cultural workers, and/or residents. For those interested, this paper can be used as a tool to:

- Understand the importance of advocating for the types of cultural facilities they want to see in their city;
- Become aware of the multiple players involved in mill redevelopment projects, and their roles and responsibilities;
- Learn about different types of cultural facilities to inform the vision for how local mills can be reactivated.

Research Questions

This study is guided by the following research questions:

- What are the key challenges mill owners have faced when redeveloping historic mills into cultural facilities?
- What are the various strategies they have used to succeed?

- To what extent has the public sector played a role in spurring the adaptive reuse of mills into cultural facilities in their city?
- How can the public sector provide more support for the creation of cultural facilities in historic mills?

Methods

This thesis was informed by interviews with over 20 mill owners, real estate developers, local government officials, nonprofit leaders, and artists—many of whom claim more than one role from this list. As a comparative study, most interviewees were based in either Lowell or Lawrence. However, some interviews were conducted with stakeholders from other mill towns across Massachusetts, and while these participants may not be directly quoted in this paper, their insight has been invaluable and informed my opinions and knowledge of the process behind adaptive reuse for cultural facilities.

In addition to interviews, this thesis also examines the plans, policies, and programs that Lowell and Lawrence have used to support the redevelopment of historic mill space for cultural industries. In addition to conversations with city officials, this information was mostly gathered through the use of publicly available documents and websites. A full list of interviewees is included in an appendix of this report.

Conclusion

With a more nuanced understanding of the context and process behind six mill redevelopment projects in two different postindustrial cities, this study offers government officials and professionals across the fields of planning, policy, real estate development, and the arts insight into the process of integrating different types of arts and cultural facilities into Massachusetts' historic mills. This paper argues that the adaptive reuse of historic mills and cultural industry development are complementary strategies for economic and community development that city officials should actively pursue by creating plans, policies, and programs in support of them. Recognizing that there is no "one-size-fits-all" approach, the goal of this thesis is to highlight the processes behind adaptive reuse for cultural facilities, and takes a close look at how a variety of stakeholders in Lowell and Lawrence have realized these types of projects.

Following the analysis of the six adaptive reuse cases in Lowell and Lawrence, I conclude that the actions of city government have a major impact on the ability of mill redevelopers to create cultural facilities. Regardless of the city, different types of mill redevelopers, including public-private partnerships (PPP), community development corporations (CDC), and independent mill owners, face similar obstacles related to the physical mill building, funding, and the creative tenants. However, both a city's context as well as the resources provided by local government are main factors influencing the mill redeveloper's approach to problem-solving and the relative ease with which they are able to overcome challenges they encounter during the redevelopment process.

Often, the distinct types of mill redevelopers have different levels of influence on and access to city officials, with PPPs and CDCs generally enjoying greater access to city resources than most independent mill redevelopers. This access can have the benefit of making the redevelopment process simpler for PPPs and CDCs. On the other hand, many independent mill owners feel that some aspects of government involvement can have negative impacts on the redevelopment process, such as restrictions on creative vision. However, most mill owners agree that broader government action through tools such as arts-focused zoning and planning can benefit these types of mill redevelopment projects. Other significant factors influencing the completion of these projects include the prior existence of and level of engagement shown by the local creative community, an independent mill owner's personal wealth and interest in the arts, and the city's reputation.

By studying the City's efforts to affect development outcomes alongside the stories of mill owners, I elucidate the impact that the public sector can have on these types of adaptive reuse projects while also shedding light on the gaps that may exist between planning and reality. Recommended actions for government officials include advocating for specific types of cultural facilities through comprehensive planning efforts and community engagement processes, subsequent changes to their zoning code, and the creation of targeted development incentives and subsidies. For arts-interested mill owners and developers, recommendations include partnerships with the public sector or non-profits, incremental development techniques, and mixed-use strategies. For artists and residents, I recommend communicating priorities to government officials, and organizing with like-minded citizens for collective advocacy-related action. A more extensive list of recommendations can be found towards the end of this thesis.

CHAPTER 2: BACKGROUND AND LITERATURE REVIEW

This literature review provides a brief overview of histories and theories related to historic preservation and mill revitalization efforts, and the use of arts and culture for economic and community development purposes. It also provides definitions of key terms that reappear throughout this paper.

Much has been written on the separate topics of historic preservation, adaptive reuse, and arts-related economic development. There is also a significant amount of literature about the overlap across some of these topics, including culture-led regeneration strategies in postindustrial cities, and the popularity of industrial buildings among artists and makers. Some relevant iconic projects such as MASS MoCA have been written about extensively, but usually with a focus on outcomes and other ramifications. However, this chapter ultimately exposes a gap in the literature, in that there has been very little written about the *process* of adapting historic mills for cultural facilities, and the role of local government in that process—these topics are explored in the remainder of this thesis.

What is a Mill Town?

As one of the birthplaces of the American Industrial Revolution, Massachusetts and the New England Region saw a development boom in the 18th and 19th centuries when many manufacturers built massive, iconic red brick structures called mills along the banks of local waterways outside of the major cities. Reliant on the rivers and canals for power, these mills manufactured textiles, shoes, guns, clocks, and other durables common to New England's old economy.[xix] Often run by paternalistic companies, mill owners were known to build entire cities and social structures that revolved around their business, causing the prevalence of municipalities that have come to be known as "mill towns" to be spread across the state and the region. Author Steve Dunwell estimates that there are more than 400 villages, towns, and cities throughout New England whose evolution and development has been tied to a mill.[xx] Lowell and Lawrence are two of the largest and most well-known Massachusetts mill towns, and should technically be called "mill cities" given the size of their populations. Though they exist on a larger scale and have larger mills than most places, like most other mill towns and mill cities, they are characterized by their former reliance on either one or a handful of primary employers and by shared features of their urban design.

By the middle of the 20th century, hundreds of mills were abandoned across the region as shifting markets made them obsolete, causing mass unemployment and resulting population decline that continues to affect many mill towns to this day. Architecturally, John Mullin describes the mills as "typically quite modest, highly utilitarian, and accented with few significant architectural features."[xxi] However, since the mills were by and large the economic and social engines of these communities, they are frequently regarded as being as culturally significant as religious structures.[xxii] As such, local communities and

government officials have widely pushed for the historic preservation of the mills, and in recent decades planners and real estate developers across the region have increasingly realized the value of their often neglected mill complexes.

Beyond community opinion and action, legal protections have also affected the fate of historic mills. All of the mills included in this study are protected under the laws of the National Register of Historic Places, which is the United States federal government's official list of districts, sites, buildings, structures, and objects deemed worthy of preserving for their historical significance.[xxiii] The register was created as part of The National Historic Preservation Act, which is a critical piece of legislation signed into law in 1966 that prohibits the destruction of many historical and archeological sites in the United States. This law was created in response to the widespread urban renewal that was destroying historic architecture across the country. [xxiv]

Mill Revitalization

With the disappearance of the companies that gave mill towns their reason for being, local government and other stakeholders have struggled to find ways to fill the economic void they left behind. For both practical and symbolic purposes, economic development strategies for the revival of mill towns have gone hand-in-hand with the revival of the mills themselves. Though multiple mills in Lawrence are still used for manufacturing purposes, this is increasingly a rarity both in and outside of Lawrence.

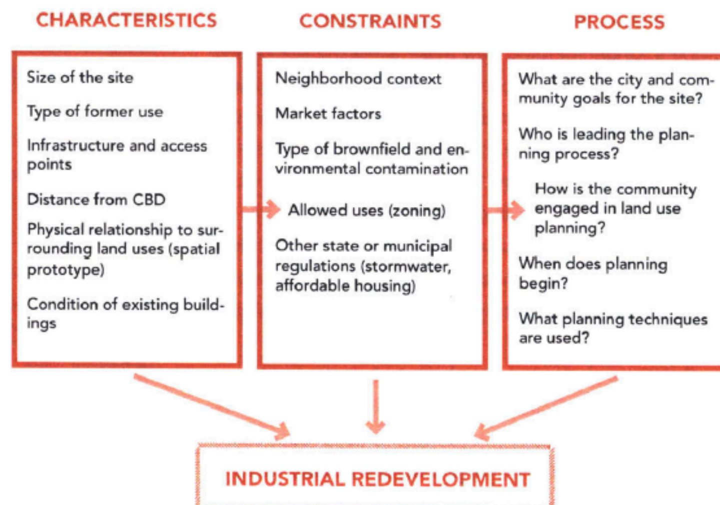
Most historic mills across New England—much like other industrial buildings across the country and world—are instead being revitalized for a wide array of other uses. The term adaptive reuse refers to the process of reusing an existing building for a purpose other than which it was originally built or designed for. Researchers such as Zenia Kotval and John Mullin have focused on the importance of the adaptive reuse of old mills, noting that finding new uses for the buildings that both generate economic activity and bring the community together is critical to both the revitalization of postindustrial cities and towns, and New England's well-being more broadly.[xxv] The spectrum of new uses for an old mill or other type of industrial building vary widely, and include housing, universities and colleges, hospitals, software and other tech companies, agriculture, shopping centers, and the use that is the focus of this study—arts and culture.

While many historic mills across New England have been renovated since the decline of manufacturing and put to new use, plenty still remain vacant and underutilized. Moreover, just because a mill was once reused, does not necessarily mean it will remain in use. Many mills have experienced repeated abandonment. For instance, Arnold Print Works was one of the original users of MASS MoCA's mill complex, but the decline of textiles caused them to have to move in the 1940s. Sprague Electric Company gave the building a second-life until the mid 1980s, but even though it manufactured more modern products, it was still susceptible to the challenges of globalization and increased overseas competition. Given the constantly changing nature of our economy, the question of how to fill New England's mill buildings may never be considered truly resolved. With government officials and communities continuing to face the challenge of how to

reanimate historic mills, this thesis' examination of the process—inclusive of the financial, technical, social, and political considerations—of creating cultural facilities in these landmark buildings remains vitally relevant to Massachusetts, the region, and beyond. [xxvi]

Planning for Adaptive Reuse

Regardless of how a property will eventually be animated, there are common characteristics, constraints, and processes that planners and real estate developers must assess when considering reusing an industrial property. As Danya Littlefield explains and illustrates in the below graphic, these categories all impact the future land use of the site redevelopment, and they are all interconnected in determining the eventual outcome.[xxvii] Significant characteristics of mills that may affect plans for reuse include the size of the building and site, the type of former use, the surrounding infrastructure and access points, the distance from the central business district, the physical relationship to surrounding land uses, and the condition of the existing buildings. Additional factors that might constrain the ability of a developer to pursue an adaptive reuse project include government policies and regulations, existence of environmental contamination, neighborhood context, and market factors. Linda McCarthy argues that meaningful community participation can also have a powerful impact on future uses of industrial sites.[xxviii] As the cases examined in this thesis show, the relative impacts of some of these variables on the process of redevelopment can be significantly different depending on whether the project is part of a city-led process (such as a public-private partnership), led by a community development corporation, or led by an independent mill owner or developer.



Graphic by Danya M. F. Littlefield, 2018

John Mullin generally echoes this framework for adaptive reuse of historic mills, and adds a few additional lessons gleaned from years of researching the adaptive reuse of New England's historic mills. He emphasizes that revitalization efforts must take regional trends into account and pay particular attention to market demands and sustainability factors. While it is unlikely but possible that the market for arts and cultural uses could become

completely oversaturated, this may hypothetically mean that there could be enough of one type of cultural facility (such as artist studios) in a city or region, but not enough of another (like a concert hall).

Mullin also argues that revitalization efforts work best when they accord with the local and regional master plans, which allow a community to advocate for the types of uses they would like to see in their city and communicate priorities to developers. Furthermore, he feels strongly that mill revitalization must build on community values and desires, otherwise the projects will not be put to use. Finally, considering that adaptive reuse is an especially complex process, financial acumen and development expertise are necessary ingredients for success. So is the support of city government in the form of tax relief agreements or incentives, zoning revisions, support with grant acquisition, and other forms of support to help the developer through the process. This thesis' findings on the process of adaptive reuse and mill revitalization reflect similar themes as those put forth by Littlefield, McCarthy, and Mullin.

The Arts and Economic Development

Looking beyond the mills themselves for a moment, arts and culture related strategies for economic development have been widely discussed in the field of urban planning in recent decades. Sharon Zukin is one of the original scholars of the relationship between culture, design, and urban redevelopment. She is widely cited in texts on the relationship between the arts and economic development for having pointed out in 1995 that culture, in the form of art, food, fashion, etc., has become the "business of cities."[xxix] As Myrna Margulies Breitbart reminds us in her book *Creative Economies in Post-Industrial Cities,* "the use of arts and culture to enhance the economy and draw importance to the rising importance of a city is not as new a phenomenon as it would seem."[xxx] Evans has both written about the long history, ostensibly beginning in Europe in the 16th century, of cities vying to attract and sustain residents by developing cultural attractions.[xxxi]

Though the strategic development of cultural industries by local governments is not a particularly new trend, Markusen and Gadwa have stated that, when it comes to the cultural economy, "knowledge about what works at various urban and regional scales is sorely lacking." In the publication of their Review and Research Agenda for Arts and Culture in Urban and Regional Planning in 2010, they call for more research into the various constituents' roles in cultural planning and how outcomes reflect their access and intentions, as well as the politics of cultural development.[xxxii] Through a series of qualitative comparative case studies, this thesis addresses this need by examining the roles of the public sector in influencing development of cultural facilities, as well as the different redevelopment processes experienced by diverse mill redevelopers.

According to Boston's Metropolitan Area Planning Council,[xxxiii] arts-related economic development strategies for planners and policy makers include (but are not limited to):

- Support of the development of cultural facilities (including spaces for both the production and consumption of arts and culture, as well as affordable artist housing)

- Providing workforce development for creative workers
- Supporting arts education in schools and through additional programs
- Designating specific arts and cultural districts within a city
- Supporting public art programs
- Coordinating city-wide cultural events such as parades and festivals
- Preserving historic buildings
- Coordinating existing arts and cultural workers, organizations, and businesses in the city and help promote them to residents and visitors

Arts-focused economic development is closely tied to the field of 'creative placemaking,' which Markusen and Gadwa define as "an evolving field of practice that intentionally leverages the power of arts, culture, and creativity to serve community's interests while driving a broader agenda for change, growth, and transformation in a way that also builds character and quality of place."[xxxiv]

As Breitbart recounts in *Creative Economies in Postindustrial Cities,* there was a multitude of research reports that were commissioned at the turn of the millennium that confirmed the positive economic impact that cultural industries and arts-related activities had on cities and regions.[xxxv] For example, a report by Mt. Auburn Associates for the New England Regional Council presented a significant amount of data to measure New England's "creative sector," and concluded that it had great potential to contribute to the region's competitive position and quality of life. Similar studies and reports continue to proliferate, and the arts has secured its position as a mainstay in economic development strategies. A more recent study put out by the US Bureau of Economic Analysis and the National Endowment for the Arts found that the arts contribute $763.6 billion to the US economy in 2016—4.2 percent of the national GDP—more than agriculture, transportation, or warehousing.[xxxvi]

The increased acceptance of the arts as an economic development strategy was critically influenced by authors Richard Florida and Charles Landry. Richard Florida's seminal text *The Rise of the Creative Class* in 2002 put forth the idea that cities should strive to attract creative workers as a way of generating and attracting new business, and he also produced many indices ranking existing cities from best to worst in terms of their success as a "creative city."[xxxvii] Florida has since been widely criticized as a neo-liberal elitist both for his ranking system and for the way he tends to overlook the value of the traditional working class and existing residents that contribute to their city's creativity.[xxxviii, xxxix] While Florida identifies people in occupations defined by levels of higher education as "The Creative Class," more in-depth studies of the creative workforce demonstrate the talent, skill, and creativity typical of a creative worker are not necessarily synonymous with higher education.[xl] This study rejects Florida's original theory that creative talent is best found outside of the boundaries of economically depressed cities, and advocates for the recognition of local talent and community-wide participation in cultural industries. In fairness, Florida has since recanted much of his previous thinking in his book *The New Urban Crisis,* which focuses on some of the unintended consequences of creative placemaking strategies, such as gentrification and displacement.

Culture-Led Regeneration and Heritage Preservation

As Cathy Stanton explains in *The Lowell Experiment,* culture-based approaches to revitalization have grown in prominence in postindustrial towns and cities seeking to restructure their economies, with Lowell being an early adopter in the 1970s and a prime example.[xli] Such approaches can take a variety of forms, including heritage trails, museums, art districts, public art projects, sports facilities waterfront recreation areas, outdoor festivals, and other performing arts events. Within such efforts, Stanton puts forth that 'the specific histories and landscapes of particular places are seen as invaluable assets that can be mobilized to help re-brand a place."

Writer Barbara Kirshenblatt-Gimblett explains that many projects—such as Lowell's National Historical Park which features museums dedicated to local industrial history—emphasize obsolete industries or ways of life, endowing them with a "second life" as heritage.[xlii] The first documented discussion concerning the importance of conserving industrial heritage took place in the 1950s led by Michael Rix of Birmingham University. Since then, organizations such as UNESCO have recognized the importance of conserving industrial heritage due to its "social value as part of the record of the lives of ordinary men and women," and its ability to provide 'an important sense of identity.'[xliii] Though heritage preservation has largely been considered a part of culture-led regeneration strategies, Kirshenblatt-Gimblett gets at the point that it is often looked at as separate from the production and consumption of contemporary culture. To help close this gap, this thesis seeks to explore the confluence of the historic preservation of mills alongside their new use as sites for the development of contemporary cultural facilities that can support the ongoing development of cultural industries.

Cultural Industries vs. Creative Economy

This thesis consciously uses the terms 'cultural industries' and the 'arts and culture sector' instead of 'the creative economy' or 'creative industries.' Cultural industries can be viewed as a subsection of creative industries that refer to artist-centered industries such as dance, music, film, visual arts, literature, etc. The term also includes artists who may use the term 'makers' based on their focus on mediums that may traditionally be categorized as crafts, such as textiles and woodworking. The use of cultural industries instead of creative industries is meant to exclude creative workers that are aimed more at technological reproduction and the mass market, such as those working in advertising. While this distinction may not always be necessary, it is useful in the context of the built environment because these tenants use space in different ways.

Cultural Facilities

The development of cultural facilities are the backbone of any arts and economic development strategy for the simple reason that without dedicated space, the arts and cultural sector cannot survive. Cultural facilities includes all spaces whose primary purpose is to present or support artists and their art. Research conducted by the Urban

Institute in 2007 puts forth the idea that arguments in support of the development of cultural facilities typically credit such spaces with promoting the following outcomes: community and economic development and social improvements; viable business ventures; and services to artists.[xliv] There are two main categories of cultural facilities—those that are primarily spaces of artistic production, and those that primarily focus on the consumption of arts and culture, whether as commodities, events, or experiences. There are also many cultural facilities the blur this line and serve both purposes, such as when artist studios hold public-facing events, or maker spaces regularly teach classes.

Evan Spetrini provides a useful overview of the differences between spaces of artistic production and consumption.[xlv] He classifies productive spaces into three major typologies: work-only studios; live/work studios; and shared studios or hourly rentals. He breaks consumptive spaces into five main categories: galleries and museums; performance venues; artisan retailers; education spaces; and other arts event venues. Under a broader definition of the "creative economy" other types of spaces would be included, such as offices for architects and design professionals, and co-working spaces. Considering this paper's focus on the importance of developing spaces for arts and culture, it focuses on the narrower scope of the cultural industries based on reasoning that other types of creative economy workers are already well-served by more traditional office space.

A Brief History of Adaptive Reuse for the Arts

Following arts and culture's rise as an economic development strategy, many mills across Massachusetts and New England have been strategically redeveloped into cultural facilities, such as MASS MoCA and the Lowell National Historical Park. However, the relationship between the arts and the adaptive reuse of industrial building stock precedes top-down reuse efforts. Most histories that trace the practice of using old industrial sites for artistic purposes begin in downtown Manhattan in the 1950s, when famed abstract expression artist Robert Rauschenberg "found a loft" on Fulton Street and began using it as his artist studio.[xlvi] As Robiglio points out in his book *20 American Stories of Adaptive Reuse*, Manhattan was still a place of production at the time, and artists were happy to take substandard living and working conditions for raw but large, bright, and affordable space.[xlvii]

After the first loft users were sued for not complying with zoning and building codes, the local artist community organized politically to fight for the right to remain. This story intersects the now epochal battle between Robert Moses and Jane Jacobs, as Moses advocated for the demolition of New York's industrial buildings in favor of urban renewal, and Jacobs, along with artists and other community residents, safeguarded them in favor of neighborhood authenticity and culture. The mayor eventually commissioned a comprehensive preservation plan for the area now known as "SoHo," and some of the first industrial heritage associations were formed.

Aaron Shkuda argues that this legal stamp of approval ensured the area's viability as a residential district, which resulted in one of the first instances of the artist displacement

cycle, as many artists sold their spaces for higher prices to non-artists, and caused renting artists to be displaced by the rising costs.[xlviii] As Spetrini notes, this threat of displacement is, of course, not only a concern for the artists, but also for other low-income residents in and around these neighborhoods as well.[xlix] It's clear that without additional policy protections in place, increased property values resulting from the agglomeration of cultural workers may eventually make these same areas unaffordable for residents and cultural workers alike.[l]

The potential negative ramifications for investments in cultural industries are not to be ignored and surely demand new, innovative policy strategies to combat them. Scholars such as Carl Grodach, Nicoel Foster, and James Murdoch have researched the relationship between the arts, displacement, and gentrification, but they have found little evidence to support claims that the presence of the arts leads to displacement and gentrification. If there is a relationship, it is clear that it is dependent on a wide variety of factors, including the initial condition of the neighborhood and the specific type of arts activity (cultural industries are generally shown to have less of a relationship to gentrification than creative industries).[li] Research on the potential negative effects of culture-led regeneration in small to medium sized postindustrial cities such as Lawrence and Lowell is currently even more inchoate. Recognizing the widely accepted potential for cultural industries to contribute to positive economic growth and community development, this thesis focuses on the process and constituents behind the creation of cultural facilities as one step towards understanding related variables that may contribute to both positive and negative impacts of redevelopment.

Takeaways

While there is ongoing debate about the relative positive and negative impacts of particular types of arts-focused economic development strategies, the literature generally agrees that arts and culture is an important part of economic and community revitalization. Government support for the preservation of existing cultural facilities and the development of new ones is a crucial element of allowing arts and culture to flourish. At the same time, the historic preservation of mills in postindustrial cities and towns across Massachusetts and New England is key to their healthy revival. As mill towns continue to seek new opportunities for growth, as well as strategies for the reuse of vacant and underutilized mills, government officials should pursue a two-pronged strategy that links the historic preservation of mills with the development of cultural industries.

There is an ample amount of literature that aims to better understand the outcomes of culture-led revitalization strategies and the field of cultural planning. Separately, there is much writing on historic preservation and the process of adaptive reuse. However, there is a gap in the literature that directly considers the confluence of these two strategies for economic and community development, and examines the processes and strategies behind their pursuit. This thesis seeks to build on the literature outlined above to understand the various elements of the process behind culture-focused adaptive reuse projects, including the role that local government have to play, and the challenges and success factors encountered by different types of mill redevelopers. With insight into the

decision-making processes, strategies, and financial considerations of mill redevelopers and the ways in which government support can impact a project, I aim to provide policy recommendations that can improve decision-making and the development of support systems for the creation of cultural facilities in historic mills.

CHAPTER 3: THE CITIES

This master's thesis presents six cases studies of historic mills that have been adapted for use as cultural facilities in some way by a variety of developers. Three of the case studies are in Lowell, and three of the case studies are in Lawrence. This chapter seeks to provide context about Lowell and Lawrence by sharing brief histories of each city, and recent planning efforts that have affected the success of adaptive reuse projects presented in subsequent chapters.

By studying relevant histories, plans, and zoning codes in each city, we can better understand the role that the public sector has played in supporting the creation of cultural facilities in historic mills in Lowell and Lawrence. This information ultimately serves to ground truth and add texture to the stories of the various mill owners, who were all asked about the role that the City played in supporting their adaptive reuse project.

A Note About the Definition of Success as it Relates to City Planning

The central question of this thesis is focused on process instead of outcomes— it asks mill owners and developers about the factors that have enabled or constrained their ability to complete the project. As such, all of the case studies included in this thesis have already been deemed a success based on their current use as cultural facilities. Be that as it may, one cannot ignore the influence that the public sector has had on the ability of these adaptive reuse projects to move forward with more or less ease or difficulty. Knowledge of the ways in which local government actors and relevant nonprofit organizations have already influenced the outcomes of the mill redevelopment in Lowell and Lawrence inform the policy recommendations provided for a broader audience of government officials across Massachusetts and New England in the conclusion section of this paper.

TABLE OF KEY CITY STATISTICS

	Lowell	**Lawrence**
Population	109,871	79,497
Median Age	32.9	31.4
Poverty Rate	21.5%	24.2%
Median Household Income	$46,972	$39,627
Total Employees	52,649	36,040
Median Property Value	$234,100	$238,200
Total Mill Space	5.2 Million Square Feet	10.3 Million Square Feet

Data Sources: US Census Bureau

AN OVERVIEW OF LOWELL

Population	109,871
Median Age	32.9
Poverty Rate	21.5%
Median Household Income	$46,972
Total Employees	52,649
Median Property Value	$234,100
Total Mill Space	5.2 Million Square Feet

Data Sources: US Census Bureau

History and Context

Lowell, Massachusetts was one of the birthplaces of the American Industrial Revolution. Colonized in 1653, the city flourished economically throughout the 18th and 19th centuries as its textile manufacturing capabilities grew and attracted thousands of entrepreneurs and immigrants to the city. By the beginning of the 20th century, however, competition increased as other New England communities caught up and developed their own mills, and thus Lowell was also one of the first industrial cities to start to decline. Lowell's textile industry steadily weakened into the late 20th century, leaving many residents jobless and millions of square feet of mill space abandoned and deteriorating along rivers and canals.[lii]

Though Lowell had gained a reputation as one of New England's most depressed mill towns by the 1960s, the city turned to a culture-based revitalization approach by the 1970s.[liii] Along with the creation of the Lowell National Historical Park (LNHP), which was the flagship project of this culture-led redevelopment, in the last quarter of the 20th century Lowell invested aggressively in other cultural assets such as a civic arena for sports and entertainment, museums, outdoor festivals, and other performing-arts events. Moreover, the City recognized the importance of diversifying its economy, and also invested in technology, healthcare, and education as drivers of economic growth. Concurrently, the City was also working to improve basic city infrastructure, such as by laying walkways along the canals and rivers and creating open space, and by developing more housing and schools. This wave of revitalization included the preservation and renovation of more than 400 historic buildings, including most of the city's mills.[liv]

At the same time, Lowell's population was becoming increasingly more diverse. As an effect of the Cambodian genocide in the late 1970s, more than 17,000 refugees from Southeast Asia (mostly Cambodia) resettled in Lowell.[lv] Lowell is now home to the second-largest Cambodian population in the United States, and though the 2010 census estimates the population is around 13,000, community leaders say the actual number is closer to 30,000.[lvi] Cambodians, along with various other racial and ethnic groups in Lowell, have played an important role in the city's cultural renaissance. While there are many factors and countless players that contributed to Lowell's recovery, strong city

leadership along with support from the state and federal government are often credited as key factors. However, though Lowell has certainly come a long way since the decline of its textile industry, the City recognizes that it still has plenty of problems to continue addressing including uneven patterns of development and persistent poverty and underemployment.

The Lowell National Historical Park as Catalyst

Lowell's answer to deindustrialization was to double down on its architectural and cultural heritage by creating the Lowell National Historical Park (LNHP). Through a collaborative effort between local, state, and federal politicians; local leaders in business and education; top urban planners and historians, and others, the LNHP was established in 1978.

As Cathy Stanton explains in *The Lowell Experiment*, the LNHP is not like traditional national parks in that it is not neatly bounded piece of real estate owned outright by the National Park Service.[lvii] Rather, it is a designated part of the city that is comprised of various historic buildings and sites relevant to Lowell's role in the Industrial Revolution. Visitors to the urban park are encouraged to follow a variety of walking tours, explore the area by trolley, or take a boat ride along the canal. Many of the historic mills in the park have been adapted to benefit the park's visitor experience, such as the Market Mills, which houses the Visitor Center, and the Boott Cotton Mills Museum, which houses a working weave room and exhibitions about the rise, development, decline, and rebirth of Lowell.[lviii] Other areas of the LNHP are zoned for a variety of other typical urban uses, such as residential and commercial, which makes it a dynamic, living part of the city rather than a museumification of it.

In addition to its success in telling the story of Lowell's industrial heritage, the development of the LNHP is often lauded as a catalyst that spurred the city's revival.[lix] The National Trust for Historic Preservation (NTHP) credits the park with "helping to spark the revitalization of over 450 buildings and 98% of the city's 5.2 million square feet of mill space."[lx] According to the NTHP, Lowell's national park attracts over 500,000 visitors each year who contribute $48 million annually to the local economy.[lxi] The City of Lowell also credits the park with its renaissance, mentioning it as a reason that the city has subsequently seen numerous public and private investments towards adaptively reusing historic mills for new uses, in addition to other major rehabilitation projects throughout the Downtown.[lxii]

This is no accident – the park was designed to have this effect. Dennis Frenchman, the principal urban designer for the LNHP, explains in his 2008 whitepaper that one of the major goals of the park's plan was to "to serve as a catalyst to revitalize the cultural, economic, and physical environment of Lowell, using most efficiently the resources of all levels of government and the private sector to attract people, businesses, and investment to what many considered to be a dying city." The other primary goals were preservation, interpretation, and developing a management structure.[lxiii]

The Lowell National Historical Park is a model of historic preservation, adaptive reuse, and urban postindustrial revitalization that many other cities still seek to emulate.[lxiv] Accordingly, the story of how it came to be, and its model of a public-private partnership has been studied and written about repeatedly. Taking the park as Lowell's first major adaptive reuse project, this thesis looks beyond the LNHP, towards the mills that were reborn in its wake. The arts and culture-focused adaptive reuse projects Appleton Mills Apartments, Western Avenue | Studios & Lofts (Western Avenue), and Mill No. 5 continue to build on the LNHP's legacy of cultural heritage preservation and creative placemaking.

Arts and Culture in Lowell

Lowell is well known as one of New England's premier cultural hubs, and as such it has a thriving community of artists, makers, creative professionals, and other types of informal culture bearers. In addition to multiple museums, galleries, and performing arts venues, the city is well known for a variety of annual festivals, such as the Lowell Folk Festival and the Southeast Asian Water Festival. A robust slate of arts and cultural nonprofits contribute to the sector, with the most prominent being the Cultural Organization of Lowell (COOL) and The Arts League of Lowell, as well as many cultural heritage-specific groups such as the African Cultural Association and Cambodian Mutual Assistance Association.

Artists and cultural workers are notoriously difficult to measure with the census because many of them do not pursue the arts as their primary source of income, and cultural work can span many other categories, including (but not limited to) education and community service. Furthermore, data typically combines information on the number of people employed in the arts, design, entertainment, sports, and media occupations. Nevertheless, census data can still provide a helpful baseline for comparison. The 2017 American Community Survey estimates that 784 residents of Lowell work in the "Arts, design, entertainment, sports, and media occupations."[lxv]

RELEVANT PLANNING EFFORTS

This section provides a brief overview of the planning efforts that have influenced (and continue to influence) to some extent the redevelopment of Lowell's mills and the creation of cultural facilities.

Cultural Planning

Lowell was one of the earliest cities to pursue cultural planning as a discreet subsection of urban planning. In the 1980s Lowell published The Lowell Cultural Plan, which is credited with raising the importance of the arts for both economic and community development purposes, and with helping to build community-wide coalitions. Though part of Lowell's

strategy has been to attract nearby artists and cultural workers to relocate to Lowell, The Lowell Cultural Plan shows that the city was also forward-thinking in its realization that culture-led economic development should seek to value and reinforce the culture of that place instead of simply importing culture as a product.[lxvi] In 1998 Lowell created an artist live/work overlay district that specifically allowed artists to live and work in the same space, including in areas that were previously zoned strictly for industrial purposes. The area of the district covers a large swath of the city's downtown, including the Appleton Mills Apartments, and it was extended to include Western Avenue in 2008. In Lowell's Zoning Book, the City notes that the overlay was established to "encourage further concentration of art, cultural, and entertainment attractions in the downtown area."[lxvii]

In 2001, the citywide conference "2001: A Cultural Odyssey" was aimed to convene residents and other stakeholders to plan for continued strengthening of the arts and humanities.[lxviii] In 2007, the local economic and community development nonprofit The Lowell Plan supported the development of an updated cultural master plan for the city (developed by COOL) which spurred the establishment of the City's Office of Cultural Affairs & Special Events (CASE) in 2008. CASE provides logistical support for select cultural events throughout the year, promotes Lowell's cultural offerings to residents and visitors, and handles permitting for film projects and public events. The City also supports the work of the Lowell Cultural Council, which is the local grantmaking body that disperses funds provided by the Massachusetts Cultural Council.

The designation of the Canalways Cultural District in 2012 through the Massachusetts Cultural Council's Cultural Districts Initiative is one of the most recent cultural planning initiatives in Lowell, making it one of 43 cultural districts recognized in the state.[lxix] The boundaries of the district include Mill No. 5 and Appleton Mills Apartments, as well as other major downtown cultural institutions like the Lowell National Historical Park, the Whistler House Museum of Art, the Brush Art Gallery and Studios, Merrimack Repertory Theatre, the ALL Arts Gallery, the Angkor Dance Troupe, Boarding House Park, UnchARTed, and the Zeitgeist Gallery. While Western Avenue is just outside of the border, it is listed on the City's website as a partner of the district.

Historic Preservation and Mill Redevelopment

The Lowell Historic Board is the City of Lowell's historic preservation agency. The Board is charged with overseeing design review, permitting, and enforcement authority in the Downtown Lowell Historic District as well as ten additional neighborhood historic districts. The Board also provides technical assistance regarding preservation and design, and helps to connect mill owners and developers with financial incentives and other resources related to mill redevelopment and preservation—many of which are listed on the City's website. The Appleton Mills Apartments, Western Avenue, and Mill No. 5, are all located within the Downtown Lowell Historic District, which is listed on the National Register of Historic Places.

In the zoning book adopted by Lowell in 2004, the City established a Smart Growth Overlay District, which allowed for less restrictions on the adaptive reuse of mill and other

historic buildings. However, Lowell concurrently adopted special measures to control for the possibility of the market causing too much of one type of use to be developed (such as market-rate housing, which is typically the most lucrative). Lowell's Downtown Mixed-Use District (DMU) was designed to ensure that the downtown maintained a diversity of land uses, such as commercial and cultural space. To this end, the City required developers pursuing adaptive reuse or other types of projects to submit to careful review and permitting processes before being approved.

The JAM Plan and the Hamilton Canal District

In early 2000 Lowell City Council adopted the Jackson/Appleton/Middlesex Urban Revitalization and Development District Plan, known as the "JAM Plan." The JAM Plan is significant to this study because two of the mill redevelopment projects in this thesis reside within JAM's boundaries—The Appleton Mills Apartments and Mill No. 5. Western Avenue is located just west of the plan's focus area. According to the City, the JAM Plan was created to "inject life into the redevelopment of the neighborhood that is located adjacent to the heart of Downtown Lowell," emphasizing historic preservation. Another goal of the plan was to "seek recreational, cultural, and entertainment facilities for the Central City Area."[lxx]

The Hamilton Canal District (HCD) is the largest single project outlined in the JAM Plan. The Appleton Mills Apartments are a part of the HCD, which aims to "reinvent 15 acres of vacant and underutilized waterfront land as a vibrant, mixed-use neighborhood connecting Lowell's downtown to its commuter rail station."

Sustainable Lowell 2025

Endorsed by the City Council in 2013, Sustainable Lowell 2025 is the City's most recent comprehensive master plan. The plan highlights both historic preservation and investments in arts and culture as key strategies to support the overall vision of the city as a place that promotes a higher quality of life for all of its residents. While the plan lists multiple goals that relate to both the arts and culture sector and historic preservation efforts, one of the most relevant to this thesis is the objective (listed alongside other arts-related goals) to "actively promote the rehabilitation and reuse of remaining vacant mills in ways that will reinforce Lowell's downtown as an attractive and authentic urban neighborhood with a robust daytime, evening, and weekend population, and a healthy mix of residential, commercial, retail, entertainment, and recreational amenities."[lxxi]

AN OVERVIEW OF LAWRENCE

Population	79,497
Median Age	31.4
Poverty Rate	24.2%
Median Household Income	$39,627
Total Employees	36,040
Median Property Value	$238,200
Total Mill Space	10.3 Million Square Feet

Data Sources: US Census Bureau

History and Context

According to the Lawrence History Center, Lawrence, Massachusetts was "the final and most ambitious of the New England planned textile-manufacturing cities developed by the Boston entrepreneurs who launched the American Industrial Revolution."[lxxii] Originally colonized by Europeans in 1655, Lawrence's textile industry flourished between the 1840s and the 1960s, attracting many other businesses and workers, including many immigrants from all over the world. Between 1890 and 1920, Lawrence's population more than doubled, growing from 44,000 residents to 94,000 residents, with about a third of residents working in the mills. The city is well-known as the site of one of the nation's most famous labor strikes, called the Bread and Roses strike, when in 1912 many of the mill workers walked out of their jobs to fight for better pay and working conditions, and the right to unionize.

Following a similar pattern as Lowell and many other New England mill towns and cities, Lawrence's textile industry began to decline after World War Two, with the migration of most companies to the U.S. South in search of cheaper labor. The city's economic fortunes further deteriorated with the flight of its middle-class population to the suburbs.[lxxiii] By 1950, Lawrence's population had dropped to 67,000.[lxxiv] Around the same time, Lawrence received an influx of Latinx immigrants from 21 different nations who were fleeing political and economic instability in their home countries. Now known as the "Immigrant City," Lawrence's population of approximately 79,000 is more than 80% Latinx, which makes it the third largest Latinx community in Massachusetts and the state's first minority-majority city.[lxxv, lxxvi, lxxvii]

Though 35% of Lawrence's economy is still manufacturing-based, with companies such as New Balance and Cardinal Shoe operating in the city, Lawrence is continuing to struggle to reinvigorate its economy following a sustained period of deindustrialization made worse by the financial crash of 2008 that resulted in a public budget crisis.[lxxviii, lxxix] A now infamous article that appeared in *Boston Magazine* in 2012 titled "Lawrence, MA: City of the Damned" proclaimed "crime is soaring, schools are failing, government has lost control, and Lawrence, the most godforsaken place in Massachusetts, has never been in worse shape."[lxxx] While the city's government *has* been a notoriously weak

institution, the election of Mayor Dan Rivera in 2013 has been a cause for optimism as key indicators for the city's economic health have improved during his tenure.[lxxxi]

In addition, Lawrence is known as a place with a dynamic and committed civil community of nonprofit organizations, residents, local property owners, and small business owners who are actively working to revitalize the city. In response to the scathing article, a mass of Lawrence community members came together to form a group called We Are / Somos Lawrence, and launched a campaign "to fight against negative and often misguided publicity" and "promote all that is good in their city."[lxxxii] The group's website includes an arts calendar that promotes local artists and art events as well as a calendar for more general community events, a job board, and stories about the accomplishments of locals, among other community and business resources. Local nonprofits Lawrence CommunityWorks and Groundwork Lawrence have been among the leaders of this movement. The Lawrence Partnership is another key nonprofit in the city that is focused on economic development and the local quality of life.

Arts and Culture in Lawrence

As a place where people have always made things, Lawrence takes pride in itself as a city for makers and artists even if it is not yet well known for it amongst outsiders. While Lawrence does not currently have any major institutional drivers of the arts, the city does have a sizable number of arts and cultural nonprofits, and numerous performing arts groups—especially dance—and multiple art galleries. Casual venues play a significant role in Lawrence's cultural scene, such as El Taller Café and Bookstore on Essex Street where a staff curator manages exhibitions of local artists on site, and there are regular open mic nights, art and writing workshops, and more. Given Lawrence's population, it goes without saying that Latinx culture is a predominant force, and there are multiple related heritage groups, as well as a large dance club scene.

The 2017 American Community Survey estimates that 249 residents of Lawrence work in the "Arts, design, entertainment, sports, and media occupations."[lxxxiii]
Again, the number of artists and cultural workers is difficult to measure— especially in a place like Lawrence that likely has a much higher proportion of informal artists and cultural workers, some of whom might not be counted by the census at all based on their immigration status. Multiple interviewees emphasized the thriving population of local artists working from their homes, and the especially engaged community of local youth who are actively involved with the arts. However, this number serves to illustrate the relative nascence of the formal arts and cultural sector in Lawrence as compared to Lowell.

RELEVANT PLANNING EFFORTS

Cultural Planning

While there have not yet been many formal cultural planning efforts to date, lifting up the city's arts and cultural scene has begun to emerge as a strategy for economic growth and community development in Lawrence. The City does not currently have an arts and culture department or staff person, but in 2015 Mayor Rivera together with the civic organization Arts Lawrence organized an Arts and Culture Summit that was attended by over 120 artists and local arts and cultural organizations. This group is currently working to "strengthen and enhance the city's arts and culture initiatives,"[lxxxiv] including work to define the boundaries of a new cultural district in Lawrence. The City also supports the work of the Lawrence Cultural Council, which is the local grantmaking body that disperses funds provided by the Massachusetts Cultural Council.

In addition, multiple interviewees mentioned the recent work of Jess Martinez, a Transformative Development Initiative (TDI) Fellow that has been assigned to work with Lawrence city officials and nonprofits by MassDevelopment. Martinez is currently working on a city-wide public art and placemaking project called Illuminacion Lawrence that will light up significant buildings and public spaces across the city. It is also important to note that multiple stakeholders in Lawrence mentioned that while the City would like to support more arts and cultural projects—financially or otherwise—in general, they do not currently have enough staff capacity or funding to contribute more to this cause.

Historic Preservation

The City of Lawrence's Historical Commission is the primary body overseeing historic preservation in the city. In its municipal code book, The City makes note of two historic districts that are in residential areas of the city.[lxxxv] The three mills featured in this study are protected as part of the North Canal Historic District, which was designated by the National Register of Historic Places in 1984. The country also recognizes and protects the Downtown Lawrence Historic District as part of the National Register of Historic Places.[lxxxvi] Lawrence's municipal code book does not make any reference to these relevant historic districts. While the City provides contact information for board members of the commission on its website, and notes that they serve as a resource to owners of historic buildings in Lawrence, there are not any relevant resources listed on the City website or other documents.[lxxxvii]

Zoning for Reuse: The Reviviendo Gateway Overlay District

Many of the most recent efforts to revive Lawrence revolve around preserving and reusing the city's more than 10 million square feet of historic mill buildings. One of the community's most significant accomplishments in this regard was propelled by the

Reviviendo Gateway Initiative (RGI), a coalition with the mission "to build human potential, create new housing and commercial space, improve the public environment and redefine the city's image."[lxxxviii] "Reviviendo" means "to revive" or "to come back to life" in Spanish, and RGI started a process to re-zone the mill district for mixed-use development with the goal of creating a "thriving, walkable, transit-oriented community for residents and businesses."[lxxxix]

Spearheaded by Lawrence CommunityWorks, Groundwork Lawrence, and community development consultant Maggie Super Church along with City officials, residents, entrepreneurs, property owners and public agencies, RGI succeeded in passing the Reviviendo Gateway Overlay District (RGO) in 2003 that relaxed density and use restrictions—allowing mills to accommodate uses such as artist studios, retail, residences, and others—promoted infill development, and included a 10% inclusionary zoning requirement for affordable housing.[xc] The RGO was the first major zoning change in Lawrence since the 1940s, and kicked off a wave of new development in Lawrence's mill district.[xci] Notably, much of the recent mill redevelopment has been for both affordable and market rate housing. Multiple interviewees noted that the while the RGO has overall had a positive impact on mill redevelopment, the lack of land-use specificity in the overlay leaves the market in control of the types of reuse Lawrence is seeing, which threatens less lucrative uses (such as light industrial) that currently hold cultural facilities.

A New Plan for Urban Renewal: Lawrence TBD

While Lawrence does not currently have a master plan, in 2016, the Lawrence Redevelopment Authority launched a new urban renewal plan called "Lawrence TBD."[xcii] The development of the plan included an extensive community engagement process, and focuses on economic development strategies for Lawrence in five main industries: arts and culture, food manufacturing and production, specialty manufacturing, healthcare, and education.[xciii] One of the plan's main goals is to "bolster the City's arts, cultural, and recreational assets and attract more visitors to Lawrence." Another relevant goal of the plan's is to "preserve, protect, and enhance the city's historic buildings and infrastructure through adaptive re-use." However, the plan does not provide strategies that directly link support of the arts and culture sector with strategies for activating underutilized space in the city's mills, nor preserving or enhancing the arts uses that are currently in the mills.

Mills Being Used as Cultural Facilities

Many of Lawrence's mills have already been reanimated with arts and cultural facilities. In addition to the three mills that are featured in this thesis (including Union Crossing, the mill at 56 Island Street, and the mill at 250 Canal Street), there are other mills in Lawrence being used by artists and creative types as well. The mill at 60 Island Street, which is mostly commercial and office space, reportedly also has a few artist studios. The Everett Mills house the arts and social justice nonprofit Elevated Thought, as well as two theater

companies— Spotlight Theater and Voices of Hope. It is also home to manufacturing companies that produce materials to support arts industries, such as National Fiber Technology, and the owner Marianne Paley has expressed interest in providing space to artists and arts organizations for temporary exhibitions. Taken together, these adaptive reuse projects show one new direction for Lawrence's economy, as long as these spaces are preserved and kept affordable enough for the city's residents to continue to make use of them. Unlike Lowell, Lawrence still has a significant amount of vacant or underutilized space in its historic mills, but there is a lack of data available about Lawrence's mill buildings.

CHAPTER 4: LOWELL CASE STUDIES

This Chapter presents an overview of the three case studies of the adaptive reuse of historic mills into cultural facilities in Lowell, Massachusetts. The chapter begins with a comparison of key facts about the redevelopment projects, and then provides background information about the process that led to the projects' completion, including key elements of the project's history and context, the developer's organizational structure and decision-making process, as well as design and financial considerations. The purpose of this chapter is to familiarize the reader with the important background information about these cases prior to the analysis of their challenges and strategies for success in later chapters.

CASE STUDIES OF CULTURE-FOCUSED ADAPTIVE REUSE IN LOWELL

	Appleton Mills Apartments	**Western Avenue**	**Mill No. 5**
Address	265 Jackson Street	122 and 160 Western Avenue	250 Jackson Street
Developer Type	Public Private Partnership	Independent	Independent
Developer Name	Trinity Financial	Karl Frey	Jim Lichoulas
Cultural Facilities	Affordable artist live/work lofts; art gallery	Artist studios; live/work lofts; art gallery; black box theater and event space	Independent theater; performing arts stages; artisan retail; events spaces
Other Uses	N/A	Brewery/taproom	Food and beverage establishments
Cultural Facilities Size	209,623 square feet	237,764 square feet	Approximately 45,000 square feet
Building Size	209,623 square feet	Approximately 250,000 square feet	Approximately 112,500 square feet
Original Year Built	1904	1890	1873
Original Name	The Appleton Manufacturing Company	The Massachusetts Mohair Plush Company	The Appleton Manufacturing Company
Original Use	Textiles	Textiles	Textiles
Year Opened	2011	2005	2013
Development Budget	$64 Million	Unknown	Unknown
Primary Funding Sources	Historic tax credits; low income housing tax credits; state growth district bond bill financing	Private funds; with some historic tax credits and community development block grants	Private funds

APPLETON MILLS APARTMENTS

Address	265 Jackson Street
Developer Type	Public Private Partnership
Developer Name	Trinity Financial
Cultural Facilities	Affordable artist live/work lofts; art gallery
Other Uses	N/A
Cultural Facilities Size	209,623 square feet
Building Size	209,623 square feet
Original Year Built	1904
Original Name	The Appleton Manufacturing Company
Original Use	Textiles
Year Opened	2011
Development Budget	$64 Million
Primary Funding Sources	Historic tax credits; low income housing tax credits; state growth district bond bill financing

Introduction

The Appleton Mills Apartments is the largest affordable artist housing development in Massachusetts.[xciv] As one of the first projects developed as part of Lowell's Hamilton Canal District, it sits on an island between the Hamilton Canal and the Lower Pawtucket Canal, squarely within the borders of Lowell's National Historical Park. Comprised of three buildings, the 209,623 square foot complex features 130 affordable apartments for artists and other creative professionals, and rents are charged based on income. Though there is a preference for artists, all residents must be income-qualified at below 60% of Area Median Income. The five-story ground floor atrium of Appleton Mills Apartments is an exhibition space called millWORKS Gallery, which hosts community events such as open studios, film screenings, and readings.

Originally built during the first half of the nineteenth century, the Appleton Mills, which housed the Appleton Manufacturing Company, are one of Lowell's most historic mill complexes. They were originally built by Lowell's founder Nathan Appleton, and primarily used for the manufacturing of cotton until 1927. Though all of the original buildings were demolished by 1904, the buildings that are used for the Appleton Mills Apartments were built between 1904 and 1918 and used by various tenants for warehousing and light manufacturing before a fire mostly destroyed the complex in 1997.[xcv] The buildings sat vacant for years, owned by local developer and landlord James Lichoulas Senior, until they were taken by the City through use of eminent domain power in 2006 and sold to

Trinity Financial, the master developer of the Hamilton Canal District at the time. [xcvi] Trinity Financial continues to own and manage the property today.

Physical Design

When Trinity Financial took on the historic preservation and adaptive reuse of the Appleton Mills, the buildings were significantly deteriorated. However, the masonry walls were sound, and they succeeded in salvaging most of the structure and retaining the historic mill building's façades.

The loft style live/work units for rent range in size from 500 to 1,400 square feet, and include a mix of unit types and layouts, including studios, and one- and two-bedroom units. As the developer's website explains, "a number of units with ground floor access also include the ability to turn the loft into a storefront by rolling up garage-style doors."[xcvii] In addition to the aforementioned gallery space, the Appleton Mills Apartments also include additional areas for the display of art, communal artist workshop space, dedicated sink rooms, storage spaces, a community lounge, and a green roof deck. The elevators, doorways, and loading docks were built to accommodate large works of art—as were the high ceilings, which range from 9 – 13 feet. The City allocated parking for Appleton Mills residents in a garage across Jackson Street.

Project History and Leadership

Trinity Financial developed and owns the Appleton Mills Apartments, while the management arm of their company (Trinity Management) handles the day-to-day operation of the building. Trinity Financial is a real estate company based in Boston that specializes in complex mixed-use projects in urban areas, and is known for its work redeveloping historic mills across New England.

Trinity Financial's involvement with the Appleton Mills began when the company responded to an RFP put out by the City of Lowell in 2006 for a master developer to design, re-zone, market, and redevelop the Hamilton Canal District (HCD). Trinity Financial won the RFP in 2007 and entered into a public-private partnership with the City. Abby Goldenfarb, Trinity Financial's Vice President of Development, was the firm's Project Manager for the Appleton Mills project, and worked closely with Adam Baacke from the City of Lowell's Department of Planning and Development, among other local agencies and organizations, including the Cultural Organization of Lowell (COOL) and the Lowell Development and Financial Corporation (LDFC).

Decision-Making Process

The decision to build affordable artist live/work space was the result of an extended community engagement process with Lowell residents. Beginning in December 2007,

Trinity and City staff collaborated on the 9-month public master planning process, which included five listening and design sessions called "visioning sessions," and numerous working group meetings. This participatory process informed the creation of the master plan and the related form-based zoning code that governs the HCD.

According to Goldenfarb, a number of artists showed up to the first public meeting in December 2007 and expressed "the desire for an artist component to the site, and the need for affordable artist housing."[xcviii] The arts was a theme that continually resonated throughout that first meeting, and in order to explore related issues in more detail, the first informal working group was formed and convened later that same month. Following this meeting, Trinity toured Western Avenue to further explore Lowell's arts and cultural scene. Recognizing the cultural relevance and economic potential of the artist community in Lowell, Trinity and the City agreed to include a significant arts component in the site plan.[xcix]

Another element of the decision making was the financial model that Trinity would need to use to redevelop the mill. When asked about how Trinity decided to turn the mill into affordable artist housing, Goldenfarb explained, "What drove us to the affordable housing program was really the ability to leverage the federal and state Low-Income Housing Tax Credits. But the program itself really rose up from our hearing from the community that this was something they really wanted." Furthermore, Goldenfarb mentioned that the market rents in the neighborhood at the time were not strong enough to support a market rate housing project in this mill.

Finances

The Appleton Mills Apartments received a significant amount of public subsidies to support its $64 million development budget. The largest portion of the redevelopment cost was financed through Historic Rehabilitation Tax Credits and Low-Income Housing Tax Credits at both the state and federal level that were purchased for $42 million by MetLife Inc.—the largest investment the insurer had ever made since it started investing in affordable-housing tax credits in 1995. In addition, Trinity received multiple loans from MassHousing, including a $1.6 million Priority Development Fund loan, a $1.6 million permanent mortgage MHFA, and $2 million from the Affordable Housing Trust Fund. Other funds included $800,000 from the Commonwealth of Massachusetts, $200,000 from the City of Lowell, $1 million from HSF, a $1 million deferred developer fee, and $13.6 million in State Growth District Bond Bill Financing.[c]

WESTERN AVENUE | STUDIOS & LOFTS

Address	122 and 160 Western Avenue
Developer Type	Independent
Developer Name	Karl Frey
Cultural Facilities	Artist studios; live/work lofts; art gallery; black box theater and event space
Other Uses	Brewery/taproom
Cultural Facilities Size	237,764 square feet
Building Size	Approximately 250,000 square feet
Original Year Built	1890
Original Name	The Massachusetts Mohair Plush Company
Original Use	Textiles
Year Opened	2005 (studios), 2012 (lofts)
Development Budget	Unknown
Primary funding sources	Private funds; with minimal historic tax credits and community development block grants

Introduction

Situated along the Pawtucket Canal just outside of downtown Lowell, Western Avenue | Studios & Lofts (Western Avenue) is a mill complex that includes four brick mill buildings on a 5-acre parcel of land. It is likely the largest artist community in the United States, and is comprised of 250 work-only artist studios, 50 live-work lofts, a cooperative artist-run gallery, a black box theater and event space, and a brewery/taproom.[ci] Artists at Western Avenue represent a wide range of creative disciplines, including painting, ceramics, fiber, woodworking, glassblowing, fashion design, book binding, jewelry making, photography, and more. There are public programs offered throughout the year, including monthly Open Studios events, art classes, and a summer art program for kids.

Most of the complex was built in 1906 for the Massachusetts Mohair Plush Company and used for the manufacture of upholstery for furniture as well as railroad passenger cars. Joan Fabrics, and later Collins & Aikman, operated an automotive upholstery factory here until 2005.[cii]

Physical Design

Artist Studios

Opened in 2005, there are five floors of artist work-only studios across three buildings. The first-floor studios have concrete floors, and all studios have at least one window, and 14-

foot ceilings with 8-foot-high walls. Each floor has a common sink area, as well as common space.

Artist Live/Work Lofts

There is a two-floor building of live/work lofts that came on-line in 2012. Many of the artists working in Western Avenue Studios were the first and current residents of the live/work lofts, and were involved in the decision-making process that influenced the specs of the loft's build out. Thus, while there are some standard characteristics of each loft, such as the simple and practical finishes that keep them as affordable as possible, each artist has had some freedom to customize their space to suit their needs.

Project History and Leadership

Karl Frey is Western Avenue's developer and owner, and he manages the building with his partner Patty Cullen and help from a small staff. He works in real estate development full-time serving as Executive Vice President of Land and Development at iStar in New York. Western Avenue is a personal project of his.

Inspiration for Western Avenue stemmed from an Urban Land Institute report Frey read that recommended specific strategies for the revitalization of Lowell, with a significant focus on Lowell's abandoned mill buildings and vacant parcels as areas of opportunity for investment. The report put forth the idea that "Lowell's new future is that of an urban residential commuter suburb of Boston with a mix of housing types and incomes, a strong arts and cultural community, and a strong tourist base." [ciii] ULI noted the trend of adapting historic mill buildings for residential use, and encouraged this to continue, writing, "Conversions of more mills and the upper levels of other downtown buildings to residential uses will become economically feasible." This report was one reason Frey decided to invest in the Western Avenue mill complex when it went up for sale in late 2005.

At the time of purchase, Collins & Aikman was the seller of the mill, and Frey did a sale lease-back with the firm. Frey's original plan was to hold onto the building until the lease expired, after which he would convert the buildings for residential use. His plan was upended, however, when Collins & Aikman went bankrupt six months after Frey bought the mill and a year later was liquidated in a Chapter seven proceeding. At the same time, the financial crisis was on the horizon, and ULI's predictions were not coming to fruition just yet. As Frey put it, "I had to figure out something to do with the mill right away. Necessity is the mother of invention."

Decision-Making Process

Frey immediately spoke with the City of Lowell's Economic Development Office, which directed him towards a few different potential tenants who were looking for space. One of these potential tenants was a group of about 30 local artists known as the Arts League of Lowell (ALL). At the time, Frey shared that they were "meeting once a month in the library and working out of their basements, garages, attics, or other spare rooms in their

home." Though the City of Lowell had been putting effort into recruiting artists who were being priced out of Boston as a way to revitalize Lowell's downtown, at the time there was a dearth of suitable studio space in the city. Accordingly, the City of Lowell was strongly discouraging Frey from pursuing his original plan of turning the complex into condominiums and encouraging the creation of studio space for artists such as those involved in ALL.[civ]

The artists, however, were not immediately on board with this plan— they had been through this before, with projects such as the Ayer Lofts supposedly being built as affordable artist live/work space in Lowell only to quickly become too expensive for artists once demand rose. As Frey recalls:

The first time I went to visit with the artists, they were not enamored at all with another developer coming in and offering them affordable studio space in exchange for their support of the project. Apparently, that had been done a few times before, and the developers who did it before me built artist lofts that weren't at all artist lofts. They were loft apartments for more upwardly mobile young professionals. So, they thought I was another one of those, and they dismissed me.

Frey kept at it, put a standardized process in place that requires tenants to prove they are certified artists, and as he put it, "eventually got them to understand I was sincere about doing what we have now proved over the last 15 years."

Finances

Western Avenue was mostly developed with private funds, but also used some public subsidies. The work-only studios received a small Community Development Block Grant (CDBG) for elevator modernization. A second CDBG helped offset the costs of environmental cleanup when the brewery/taproom moved into the former boiler room. Part of the development of the on-site cooperative art gallery (The Loading Dock Gallery) was supported by a grant that the Western Avenue Studios Artist Association (WASAA) received from the Lowell Cultural Council. In addition, the live/work lofts used some historic tax credits and tax-exempt bonds from MassDevelopment. [cv]

As a result of Western Avenue's steady progress and solid record keeping, investor TD Bank explained that they decided to extend a construction loan for the development of the live/work lofts because Frey was able to show that throughout development and stabilization of the studios, the project experienced a combined vacancy and credit loss of less than one percent. The project generally stays full and there is consistently a waitlist for studios and lofts.

While Frey has thought about selling the building, he is well aware that to sell it would mean to erase the incredible community of artists that has coalesced around the project. He says, "If I sold it, there's no doubt it would implode. There's no doubt in my mind, it wouldn't survive. Who's going to take care of it? I know the effort that has been put into it and how hard Patty works on it." When asked about his motivations for pouring his heart

and soul into this project, Frey is frank, "I had to save this building or it could have taken me down financially. After years of feeding it—it finally works. The creative community stuck with us, so we are going to stick with them."

With this in mind, Frey is currently trying to figure out how to turn the entire complex into a limited-equity cooperative. He explains:

I am trying to figure out how to get it into the hands of the artists with a financial structure and governing documents so nobody can screw it up. One day, we'll turn the project over to the artists and have them take ownership in a way such that the day that they do, the total cost of ownership will be exactly what it was when they were renting the day before.

MILL NO. 5

Address	250 Jackson Street
Developer Type	Independent
Developer Name	Jim Lichoulas
Cultural Facilities	Independent theater; performing arts stages; artisan retail; events spaces
Other Uses	Food and beverage establishments; housing
Cultural Facilities Size	Approximately 45,000 square feet
Building Size	Approximately 112,500 square feet
Original Year Built	1873
Original Name	The Appleton Manufacturing Company
Original Use	Textiles
Year Opened	2013
Development Budget	Unknown
Primary funding sources	Private funds

Introduction

Located in downtown Lowell just on the edge of the area recently dubbed the Hamilton Canal District, Mill No. 5 is a mixed-use indoor streetscape of local businesses and cultural offerings. It occupies the fourth and fifth floor of a historic textile mill that has residential property on its first three floors. Mill No. 5 features an independent movie theater that doubles as a performing arts space, a yoga studio, café, record store, weekly craft and farmers market, workshops for musicians and artists, and a variety of small shops selling artisanal goods such as musical instruments, books and collectibles, and more. There is also an additional stage and seating area that supports regular concerts, and Mill No. 5 regularly hosts other programs such as a specialty food tour. cvi

Physical Design

Mill No. 5 has used the façades of historic buildings salvaged from main streets in Lowell and across New England to form the hallways within the mill. In a recent interview, Lichoulas cited the history of Lowell as one of his major inspirations for the project, saying "you look back at the black and white pictures of downtown Lowell, it was a really vibrant, exciting place – a center of commerce." He explains, "I took discarded storefronts, windows, and doors and recreated the feeling of what it might have been like to walk down Merrimack or Market Street in Lowell back in its heyday."

Project History and Leadership

Developer, owner, and property manager Jim Lichoulas began his career with his family's real estate development business shortly after graduating from Tufts University with a degree in Architectural History and Economics in 1995. The property that now holds Mill No. 5 has been in his family since 1975, when his father and grandfather purchased the entire Appleton Mill complex with plans to convert it into residential property. Over time the family has sold off some parcels of the complex, and a large seven-acre swath of it was taken by eminent domain by the City in 2006 to use for the Appleton Mills Apartments. The building that holds Mill No. 5 is their last foothold. Though the Lichoulas family originally planned to turn the entire building into condominiums, the financial crisis of 2008 caused the market for condos to fall apart, leaving the fourth and fifth floors of the mill at 250 Jackson Street vacant. Additionally, as part of the City's Downtown Mixed-Use Zone, Lowell discouraged the use of the entire property for residential purposes, and pushed the Lichoulas family to keep half of the building for commercial purposes. Jim Lichoulas saw this as his "opportunity to do something creative."

Decision-Making Process

When asked about his decision-making process to create Mill No. 5, Lichoulas brought up other creative enterprises that have been succeeding and growing in Lowell. He explained, "I looked around at a couple of things in Lowell that made me think something else could happen in those spaces. One of those things was Western Avenue, and the other was the Life Alive, a small vegan independent restaurant that has since expanded to Cambridge, Brookline, and Salem." He continued, "In a place like Lowell, where the downtown was dead and still is, [Life Alive] is able to thrive because it is very high quality and offers something special to people. It has become a destination and a landmark." With the understanding that a less standard idea can work in Lowell if it offers valuable and memorable experiences to people, Lichoulas decided to build something that runs counter to the "soulless development" of many of the other historic mills in Lowell and other postindustrial New England cities.[cvii]

For Lichoulas, building Mill No. 5 was an opportunity to pursue a dream of creating the kind of space he and others would want to spend a lot of time in. Plus, it offered an exciting alternative to the more common development projects he was used to working on. In his words, "building apartments and condos can be boring and formulaic. This is an opportunity to do something different, to really make a change." Developing a cultural hub also provided him with the ability to take on certain tasks that allowed him to flex his own creative muscles. "Right now we are trying to expand our live music offerings, and I really like designing the posters for that. In no other real estate job could I design posters for music [events]."

Finances

Mill No. 5 did not receive any public subsidies or incentives. The project has been supported by Lichoulas and the income he earns through work with his family's real estate company and other real estate investments.

This does not mean that Mill No. 5 is not eligible for outside support. Lichoulas explained that he had considered registering certain parts of Mill No. 5 as a non-profit organization (such as the theater) in order to become eligible for different funding sources. Yet, although he admitted that it can be tempting to try to tap into those resources, he ultimately decided against that strategy because he felt it might mean he would have to give up control of his vision. He also acknowledged that while other mills are using incentives such as Low Income Housing Tax Credits (LIHTC) to help with development, he does not want to use his property in that way because he believes in helping Lowell to grow by "providing interesting experiences."

Mill No. 5 did inadvertently receive help from one grant recently, however. A couple of years ago a tenant was planning to create a coworking space for fashion production. Since they were a non-profit, they were eligible for and received a grant that helped to renovate the fifth floor of the mill. Though the endeavor did not end up working out for the tenant due to their overall financial situation, the resources they brought to Mill No. 5 have had an enduring effect since they allowed Lichoulas to open up the fifth floor for activity sooner than he would have been able to otherwise.

Lichoulas describes Mill No. 5 as "a grass roots movement that is constantly developing," and explains that he and his team have been building it out gradually and incrementally, based on available finances and other programmatic opportunities. To keep costs down for the organization and the tenants, Mill No. 5 currently limits its hours to the times when people are most likely to be out—Thursday and Friday evening, and Saturday and Sundays. Those are the hours when tenants are required to be open, but beyond that, businesses may decide for themselves what other times to open.

CHAPTER 5: LAWRENCE CASE STUDIES

This Chapter presents an overview of the three case studies of the adaptive reuse of historic mills into cultural facilities in Lawrence, Massachusetts. The chapter begins with a comparison of key facts about the redevelopment projects, and then provides background information about the process that led to the projects' completion, including key elements of the project's history and context, the developer's organizational structure and decision-making process, as well as design and financial considerations. The purpose of this chapter is to familiarize the reader with the important background information about these cases prior to the analysis of their challenges and strategies for success in later chapters.

CASE STUDIES OF CULTURE-FOCUSED ADAPTIVE REUSE IN LAWRENCE

	Island Street Studios at Union Crossing	**The Mill at 56 Island Street**	**The Mill at 250 Canal Street**
Address	50 Island Street	56 Island Street	250 Canal Street
Developer Type	Community Development Corporation	Independent	Independent
Developer Name	Lawrence CommunityWorks	Chet and Gary Sidell	Michael Broomfield
Cultural Facilities	Artist studios; dance studio	Art Education Center; art gallery; theater company; artist studios	Art gallery, artist studios
Other Uses	Affordable housing; commercial space	Brewery/taproom	Warehousing, light manufacturing
Cultural Facilities Size	Approximately 40,000 square feet	Approximately 25,000 square feet	Unknown, houses approximately 50 artists and makers
Building Size	Approximately 240,000 square feet	Approximately 30,000 square feet	303,902 square feet
Original Year Built	1916	1915	1886
Original Name	Southwick Mill	Unknown	Washington Mill
Original Use	Textiles	Textiles	Textiles
Year Opened	2012	1993	1980s
Development Budget	Approximately $43 Million	Unknown	Unknown
Primary Funding Sources	Historic Tax Credits; New Markets Tax Credits; Low Income Housing Tax Credits	Private funds	Private funds

ISLAND STREET STUDIOS AT UNION CROSSING

Address	50 Island Street
Developer Type	Community Development Corporation
Developer Name	Lawrence CommunityWorks
Cultural Facilities	Artist studios; dance studio
Other Uses	Affordable housing; commercial space
Cultural Facilities Size	Approximately 40,000 square feet
Building Size	Approximately 240,000 square feet
Original Year Built	1916
Original Name	Southwick Mill
Original Use	Textiles
Year Opened	2012
Development Budget	Approximately $43 Million

Introduction

The Island Street Studios are a part of Union Crossing, a 240,000 square foot converted mill building owned by Lawrence CommunityWorks (LCW) in the North Canal Historic District of Lawrence, Massachusetts. This adaptive reuse project was the first mill redevelopment project in Lawrence that is mixed-use, owned by a nonprofit entity, and driven by resident participation.[cviii] The mill is comprised of five stories and a basement, and the artist studios occupy the majority of the mill's second floor. The top three floors of the mill include over 60 units of affordable housing, while the mill's first floor houses a dance studio, a number of non-profit organizations including Groundworks Lawrence, and some vacant space that is zoned for commercial use.

The Island Street Studios include 27 work-only loft-style studios that are used by a variety of artists working in many disciplines, including photography, painting, sculpture, videography, woodworking, stained glass making, weaving, jewelry making, and more, and artists are known to host monthly open studio events for the public. LCW makes clear that the studios are also available to "artists, makers, entrepreneurs, and organizations," and studios have reportedly been occupied by other types of creative professionals as well, including an architect, a life coach, and an eBay reseller. [cix, cx]

The mill, formerly known as the Southwick Mill's Building 9, sits on a piece of land known locally as "the island," which was the heart of manufacturing in the region for more than a century and is now, mill-by-mill, being reborn as an affordable mixed-use neighborhood.[cxi] "The island" is located between the North Canal and the Merrimack River, is well connected to the downtown and the nearby commuter rail by the Duck

bridge, and also benefits from being at the intersection of interstates 93 and 495. The Union Crossing mill building is behind the mill at 56 Island Street (which houses Essex Art Center).

Originally used as a metal casting foundry, Union Crossing's mill was redeveloped into a textile mill for cotton in 1916. The textile mill operated until 1950, after which the building primarily served as a commercial space for the Southwick Clothing Company, as well as for other commercial tenants. The building was purchased in 2007 and redeveloped by Lawrence CommunityWorks.[cxii]

Physical Design

The Island Street Studios at Union Crossing are situated along a long hallway on the mill's second floor. The studios vary in size from 205 to 535 square feet, each one with exposed brick walls, twelve-foot ceilings, large windows, and polished wood floors. The space includes a community room available to artists to use for classes, meetings, workshops, or other events.

Project History and Leadership

The nonprofit community development corporation Lawrence CommunityWorks is the owner and developer of Island Street Studios and the entirety of the Union Crossing building at 50 Island Street. The property is managed onsite by First Realty Management. With over 5,000 residents and stakeholder members and having generated over $110 million in investments, LCW is a major force behind the redevelopment of Lawrence.[cxiii] As stated on its website, the organization's mission is to "weave together community planning, organizing, and asset-building efforts with high-quality affordable housing and commercial development to create vibrant neighborhoods and empowered residents."[cxiv] Redeveloping the vast amount of vacant and underutilized historic mill space in Lawrence has become a core part of LCW's mission, and the organization is poised to develop over 400,000 square feet of historic mill space and counting.[cxv]

In addition to Union Crossing, LCW also owns two other historic mills in the neighborhood at differing stages of development. These include:

- The Dye Works Building also at 50 Island Street. Formerly known as Southwick Mill Building 11. Currently being stabilized for future use as a commercial and/or community space.
- The Duck Mill at 4 Union Street, opened in January 2017. Includes 73 affordable apartments and ground-floor shops and restaurants.

Lawrence CommunityWork's efforts to transform Lawrence's mills have been part of a broader coalition working to turn the mill areas into vibrant neighborhoods with new businesses and housing. Working closely with partner Groundwork Lawrence (GWL)—a nonprofit organization working to improve Lawrence's environment and increase access

to open space—LCW has been building relationships with City officials and public agencies, residents and entrepreneurs (with a focus on the Latinx population), and property owners in the area to create the conditions necessary for neighborhood-wide revitalization.[cxvi]

Decision-Making Process

The decision to build the Island Street Studios at Union Crossing was the result of resident participation in the planning process, as well as unforeseen logistical challenges with the adaptive reuse project. When asked how the idea for artist studios at Union Crossing came to life, LCW's Executive Director Jess Andors first spoke about the participatory planning process that LCW conducts for any real estate project it is involved in. She explained:

When we did the master planning around the mills that we acquired, people talked about how they didn't want to just see them as housing, they wanted to turn this area into a vibrant neighborhoods again, and so they wanted mixed-use in the [mill] buildings. People talked about arts and culture spaces, and they also talked about childcare spaces, they talked about a whole range of things that they see as part of a healthy neighborhood.

Though the community had expressed interest in spaces for the arts at Union Crossing, the Island Street Studios were not originally part of the plan for the building. The second floor of Union Crossing was slated to become space for childcare, but the nonprofit childcare company ultimately ended up pulling out of the deal. As a result, Andors said, "We were left with all of this commercial space that we had no idea what to do with."

To help LCW figure out what to do with the space, they hired an outside consultant named Jen Faigel, who had experience working with other places that developed spaces for the arts. At first, the team explored the idea of creating artist live-work studios in the building, but they were too far into the development process to increase the number of housing units on the site. Another constraint on the space was that they had to develop it as a New Market Tax Credits deal. Together, the team landed on the idea of turning the second floor into artist work studios. As Andors explained:

We trusted Jen, and she thought [the arts] could work here, and I thought it could work because we knew the Essex Art Center had a couple of studios they were renting in that way, and that a lot more people were interested in them. But, it was also, honestly, that we had to do something here. So we felt like, let's try and build it and see if they will come.

Another factor that influenced LCW's decision was their knowledge of the local creative community through their youth program Movement City, which encourages young people between the ages of 10-18 to explore the fields of design, technology, and the performing arts. Andors described wanting to add to the inventory of spaces for local

youth and other creatives to produce and showcase their art. This ultimately led to the inclusion of the community room in the design for Island Street Studios, which is used for a variety of community events— including showcases for Movement City.

In addition, LCW rents some of the ground floor spaces to arts groups. For example, one of the ground floor spaces is a "movement studio" which is being rented by a dance operator, and she also rents it out to other individuals and groups that need space to rehearse and teach classes. By creating multiple spaces for arts and culture in the same building, Andors aims to create more of a draw for creative types and become self-sustaining.

Finances

The Island Street Studios at Union Crossing was financed by a variety of public subsidies, grants, and philanthropic donations. The total budget for the development of the building was about $43 million, but it is unclear what portion of that was allocated for Island Street Studios. While there were over 35 different funding sources for the Union Crossing project as a whole, the Island Street Studios primarily relied on New Market Tax Credits, federal and state Historic Tax Credits, and a leveraged loan from Boston Community Capital. Andors shares, "It was an unusual New Markets deal because it was a New Markets deal with no anchor tenant." In addition, the property in general needed significant environmental cleanup, and received $1,557,902 from MassDevelopment's Brownfields Redevelopment Fund for site assessment and cleanup of the property in 2010 and 2011.[cxvii]

The financial crisis of 2008 also played a role in the decisions around the development of Union Crossing. LCW purchased the mill building in 2007, and the recession hit a year later. Given these circumstances, it took LCW a long time to find investors for the Low Income Housing Tax Credits that they were using to finance the top three floors of the building, and so Andors explained that they "needed to put the New Markets deal together quickly to refinance, get those other lenders paid back, and to be able to develop this [commercial] space. So we couldn't contemplate scrapping [the New Markets deal]."

THE MILL AT 56 ISLAND STREET

Address	56 Island Street
Developer Type	Independent
Developer Name	Chet and Gary Sidell
Cultural Facilities	Art Education Center; art gallery; theater company; artist studios
Other Uses	Brewery/taproom
Cultural Facilities Size	Approximately 25,000 square feet
Building Size	Approximately 30,000 square feet
Original Year Built	1915
Original Name	Unknown
Original Use	Textiles
Year Opened	1993
Development Budget	Unknown
Primary Funding Sources	Private funds

Introduction

The mill at 56 Island Street is a relatively small mill building that shares a parking lot with Union Crossing, but has street frontage on Island Street while Union Crossing does not. The 21,000 square foot building is three stories total, and houses four tenants, including Essex Art Center, the Acting Out! Theater Company, an informal artist collective, and a brewery/taproom. Though there are multiple arts and cultural tenants in the mill at 56 Island Street, this case study focuses primarily on Essex Art Center (EAC), which takes up the entirety of the first floor and offers art instruction and gallery exhibitions.

Project History and Leadership

Gary Sidell is currently the owner, developer, and manager of the mill at 56 Island Street. Gary Sidell has worked in Lawrence since 1993, when he began working for his father Chet Sidell's woman's apparel company, KGR Inc., which was operated out of the mill at 60 Island Street. Soon after Gary began working at KGR Inc. his father began to take a deeper interest in property development and bought both the mill at 60 Island Street as well as the one next door at 56 Island Street, which was the beginning of the Sidell's legacy of redeveloping many of Lawrence's deteriorating mills.[cxviii]

In the early 2000s, Gary joined his father in starting Bell Tower Management, a real estate development and management company that specializes in the rehabilitation of historic

mill buildings. Chet passed away in 2018, and Gary now runs the entire real estate operation for the family. While the development and management of various properties owned by others in Lawrence is now Gary SIdell's main business (and he eventually sold the mill at 60 Island Street), he still owns the mill at 56 Island Street.

Decision-Making Process

Gary's father Chet was the one who decided to use the mill at 56 Island Street for arts and culture. Chet was known around Lawrence for his philanthropic contributions to the city, and Gary describes him as someone who "was a very social guy, and very involved philanthropically and economic development-wise in the city for many years." Upon Chet's passing, *The Eagle Tribune* published an article titled "*'Chet' Sidell Leaves Lasting Impact in Lawrence*," which detailed how Chet used his successes in business to support philanthropic endeavors, including the Essex Art Center.[cxix]

Back in 1993, Chet Sidell was friends with the founders of Essex Art Center, Leslie Costello, Linda Maddox, and Helen Tory. The three Bradford college classmates originally opened the nonprofit art center in a small storefront on Essex Street in downtown Lawrence, but decided to move to 56 Island Street when Chet Sidell offered them the 10,000 square foot space in the mill building for what Gary Sidell and Cathy McLaurin (the Director of Essex Art Center) both confirm was a "very affordable rate."

When asked why Chet decided to offer the bulk of the space in his new mill to a nonprofit arts center, Gary explained that they "always felt that arts would drive the economy." Gary also believes that Chet's relationship with the three founders of Essex Art Center had a lot to do with his decision. He says that his father "had a lot of trust in them and their vision. We thought they could add to the activity that didn't really exist anywhere else in the city."

Finances

The Sidells did not receive any public subsidies or incentives for redeveloping the mill at 56 Island Street. Given that they bought both 56 and 60 Island Street around the same time, much of the Sidell's financial strategy was based on the idea that having arts and cultural activity in the mill next door to their larger multi-tenant commercial property could help attract tenants and raise the property value of 60 Island Street and other properties in Lawrence.

Gary Sidell also explained that arts and cultural tenants often do not require the developer to invest as much in the property up front as they might have to for other types of tenants. He explains the thought process behind taking on Essex Art Center as the anchor tenant of 56 Island Street:

We knew they were not going to be able to afford much, but they would take a space that was pretty raw and add life to it and grow into it. From our perspective, it was more about activating a building with cool uses, not necessarily that we are going to walk away with a big-time profit. That was never the motivation. But we thought that over time, if we could support them and they could grow, maybe we would be able to attract others to the area.

Gary Sidell continued to explain more of the financial reasoning behind the project:

[The arts tenants] have been enough to maintain profitability and pay our mortgage and taxes and all the things that go along with it. If I really wanted to get higher rents, I would have to make different types of investments in the space. I would likely have to put in an elevator and other improvements, and I'm going to have to wait longer to get that money back. We look at it as, we really love and believe in those [arts] uses, and they are the types of people that can take raw spaces and turn them into beautiful spaces. We're proud of that.

Additionally, Essex Art Center's status as a nonprofit has allowed the art center to raise the funds to fix up their own space, taking some of the onus off of the Sidells. In 2009 EAC received a $95,000 grant from MassDevelopment and Massachusetts Cultural Council's joint fund for cultural facilities for "maintenance and renovation including window replacement, creation of a vestibule area and new classrooms; office and gallery space relocation; staircase replacement; ceiling repair; HVAC improvements; and new storage space."[cxx]

Sidell sees the addition of the brewery as a way to cross-subsidize some of the lower rents that the art organizations and artists pay. He explained, "Now that we have the brewery coming in, I look at it as making up for those losses [from the arts tenants.]. Not that I'm going to make a killing on that either, but I couldn't be happier with the mix of uses now. But you have to really be in this for the long haul and for the right reasons."

THE MILL AT 250 CANAL STREET

Address	250 Canal Street
Developer Type	Independent
Developer Name	Michael Broomfield
Cultural Facilities	Art gallery, artist studios
Other Uses	Warehousing, light manufacturing
Cultural Facilities Size	Unknown, houses approximately 50 artists and makers
Building Size	303,902 square feet
Original Year Built	1886
Original Name	Washington Mill
Original Use	Textiles
Year Opened	1980s
Development Budget	Unknown
Primary Funding Sources	Private funds

Introduction

The mill at 250 Canal Street is a six-floor, 300,000 square foot building that sits on an island between the Merrimack River and the North Canal. Part of Lawrence's North Canal district, the mill sits on the edge of the north canal, just down the waterway from Essex Art Center. A few hundred feet from the Duck Bridge, the mill has easy access to Lawrence's train station to the south, and the Essex Street commercial corridor to the north.

The mill at 250 Canal does not explicitly market itself as a space for arts and culture, but since the first artist rented a space in the building to make work in the late 1980s, there has been a rotating group of artists and makers that have their studios in this building. The owner estimates that there are now about 50 artists and makers currently operating in the building. One of the most well-known and established of these artists is named Markus Sebastiano, a mixed media artist who founded Blochouse Gallery inside the building in 2013. His 3,000 square foot studio holds not only his own workspace, but also smaller partitioned spaces that he sub-rents to members of an artist collective that he runs. As the name implies, part of the space is also used as a white-walled art gallery that regularly holds public events.[cxxi]

The mill complex that the mill at 250 Canal Street was once a party of was known as the Washington Mills (originally named the Bay State Mills) and used to house the American Woolen Company.[cxxii] Established in 1899, the American Woolen Company was the primary employer in Lawrence until the 1950s, when it moved production to the South, and then overseas.[cxxiii]

Project History and Leadership

The mill at 250 Canal Street is currently owned and managed by Michael Broomfield, who operates the property under the company name Andrea Management Corporation. He inherited the building from his mother-in-law in 1983, who had been managing the mill since the passing of her husband, the mill's previous owner, in 1973. Broomfield's father-in-law purchased the mill at 250 Canal Street along with the adjacent mill at 270 Canal Street when they both came up for sale in 1972 after running his textile manufacturing company Loren Products in the Washington Mills since the 1960s.

Broomfield began managing both buildings in 1983. At the time, the mill at 250 Canal Street had about four tenants spread out over its six floors, and most of them were using the space for storage and warehousing. In 2006, after the creation of the Reviviendo Gateway Overlay District, Broomfield sold the mill at 270 Canal to the Architectural Heritage Foundation (AHF).[cxxiv] AHF turned it into the Washington Mill Lofts and kicked off a series of housing developments in the district.[cxxv]

By the late 1980s at 250 Canal, most of the large storage and warehousing tenants had also either gone out of business or moved, and Broomfield was faced with the task of filling the massive building with new tenants of various sizes. He now has a mix of approximately 50 tenants in the building, including a variety of artists and other types of creatives and makers, as well as some warehousing. The mill at 250 Canal is the only property that Broomfield and his company owns and manages.

Decision-Making Process

Once the larger tenants began to vacate the mill at 250 Canal, Broomfield began strategizing around the types of tenants he would ideally like to attract in their place. Though the easiest solution would have been to attract replacement warehousing and storage clients that could more easily make use of the large, open floorplates, Broomfield explained that mills have become obsolete for warehousing in the wake of industrial parks. After putting that idea aside, he said that "artists were something that came to my mind sometime in 1987."

Understanding that there was a need in Lawrence for artist live/work space, Broomfield approached City officials to see if they would be interested in providing some seed money through a grant they received from the Massachusetts Cultural Council. Though the City listened, they ended up giving the grant money to another organization instead, causing him to shift his strategy towards building out work-only artist studio space. This involved building walls and subdividing the floors into smaller spaces.

Once Broomfield rented his first studio space to an artist, others naturally followed. Cathy McLaurin, currently the Director at Essex Art Center, was the first artist to rent studio space in the mill at 250 Canal Street. As Broomfield remembers it, "I built the space, and then that attracted other artists, and then before I knew it I had a dozen different studios." Once there was a quorum of artists in the mill, some of them began to collaborate and host Open Studios events.

Broomfield liked the idea of artists working together and hosting events, because he realized that if his mill became a place that people really enjoyed spending time in, then that word would spread and lead to more artists renting space from him. Therefore, when an artist asked Broomfield to carve out a collaborative space that they could use to socialize and host different types of programs, he agreed. Unfortunately, it was around this same time that the artist who had been leading these efforts had to abandon her studio for personal reasons, and nobody picked up the reins, so the communal space never happened.

When asked why Broomfield prefers to rent to artists over other types of tenants, his first answer was that "they are gentler on the building." He explained that "warehouses are a little rougher—they've got equipment, they tend to do more damage." Another reason Broomfield decided to focus on artist workspace is because he is personally passionate about the arts. In his own words, he said "I have a passion . . . I mean, I'm a member of the Museum of Fine Arts, Isabella Gardner. I love all of that stuff in my personal life. I like the people, I like what they do, I appreciate the art. It's a nice feeling to have here so that I can visit from time to time, and chat. It makes me happy."

Finances

Broomfield did not receive any public subsidies, grants, or incentives to adapt his mill building for creative uses. Since Broomfield inherited the building through marriage, he did not have many upfront costs associated with the building. However, by the time he inherited it the mill had been neglected for a while, and Broomfield describes the buildings as having been in "disrepair, and falling apart," with a leaking roof and broken windows. While at first he did not have the funds to make the types of improvements that were needed, as leases began to come due, he negotiated more favorable terms to be able to increase revenues and reinvest in the building.

One of the financial advantages of deciding to rent to artists and makers was that Broomfield did not need to put a significant amount of money into interior renovations. He explained:

I didn't have to renovate the inside because I wasn't offering Class A space. The tenants that I had and that I was attracting didn't require it, and they didn't want to pay for it in the form of increased rents. I created a niche where I could get people that didn't have a lot of money to come to me. Others were putting money into the building to try to get more rents, but I didn't do it that way.

Broomfield tends to subsidize the rents for artists because he recognizes that "generally speaking, it's a hobby, though some of them try to make a living at it. But sometimes you don't get discovered until you're dead, so they usually have a tight budget." He reiterated, "I want artists here, I want that type [of tenant]. and so as much as I can I try to help out a bit."

CHAPTER 6: ANALYSIS

> "I don't think this is just a quick fix for what to do with a mill."
> *– Abby Godenfarb, Trinity Financial*
>
> "I honestly don't see why other cities couldn't do this. Obviously, Lowell has done it, and I think Lawrence has the opportunity. I don't really see why others couldn't spur on more arts and culture—I don't see too many deterrents. Any postindustrial city that still has vacant mills has an opportunity to revitalize them with art. I think you have to find the right combination of developers and city leadership to see it through, but I don't really see why other cities couldn't replicate that."
> *– Gary Sidell, the mill at 56 Island Street*

This chapter presents an analysis of the six cases of arts and culture-focused mill redevelopment described in the preceding chapters. As you have read, behind each case is a unique story about the project's history, the leadership's decision-making process and strategy, and the financial considerations of redevelopment. The case studies showcased included projects led by three different leadership structures, including a public-private partnership (PPP), a community development corporation (CDC), and multiple independent mill owners (all of whom also acted as developers of their project).

Despite the particularities of each case, all of the different types of developers faced similar challenges in carrying out their plans, including hurdles related to the physical building, funding, and the intended tenants for the project (artists and other creative professionals). Each adaptive reuse project addressed these problems to differing degrees and using a variety of methods. However, the organizational structure of the development team and the relative involvement of the City affected the degree of relative ease or difficulty with which the developers navigated the project's challenges and applied solutions. City-specific policies, plans, and programs in Lowell versus Lawrence also had a significant impact on the redevelopment process. Furthermore, the urban design and master planning efforts of each city made difference as well.

This analysis is organized into four main section, including challenges and solutions related to:

- The mill
- Funding
- The cultural industry tenants
- Urban design and master planning

Based on patterns found across organizational structures, cases are grouped together and referred to by the developer type, including:

- Public-Private Partnership (PPP)

- Community Development Corporation (CDC)
- Independent

Following this analysis, the next and final chapter will use the various challenges and solutions explored here to propose a set of policy recommendations for local government, as well as ideas for mill owners/developers and artists/arts supporters about how to pursue or advocate for the creation of cultural facilities within historic mills.

THE MILL

Mill preservation and reuse necessarily begins when a developer takes control of an existing mill building. The redevelopment process is then influenced by the characteristics of the physical mill building, and city policies related to its use. Adaptive reuse projects have been significantly impacted by city decisions about zoning, and policies related to permitting and parking. This section also explores challenges and strategies specifically related to the logistics and design process behind the creation of cultural facilities within historic mills.

Acquiring The Mill

The first step for any mill redevelopment project is to take control of the building. Most of the privately-owned mills were inherited by the owner through family members. Contrastingly, the PPP and the CDC both used its relationship with the City to help acquire their building. In the case of the PPP, the City of Lowell used eminent domain power to take control of the mill, later giving Trinity Financial the rights to develop and own it. By partnering with the City, Trinity was able to acquire a building it might otherwise not have been able to. The CDC also used its strong relationship with the City as an asset when buying the Union Crossing mill. The Executive Director of Lawrence CommunityWorks (LCW), Jess Andors, explained that LCW's track record of success in Lawrence, the trust they have earned from the community, and the "open lines of communication and dialogue with the mayor's office" have affected their ability to gain the support they have needed to buy and redevelop mill buildings in the city.

Zoning And Permitting

Obtaining the legal right to redevelop a property is typically the next step any developer must take before embarking on an adaptive reuse project. Depending on the city's zoning code, developers may need to petition government officials for special permits to allow for a change in land use. Both Lowell and Lawrence have adapted their zoning codes in recent years to allow for easier redevelopment of the mills. However, differences in their codes, as well as the different organizational structures of developers, have impacted the relative ability of developers to create cultural facilities in historic mills. Beyond zoning, cities often require a host of other steps to be taken in order to qualify for redevelopment approval, and the developers' relationship to city government can play a role in this process.

The relative ease with which developers navigated zoning for cultural facilities was affected more by the city they were in than by the structure of their organization. Lowell has made strides in zoning specifically for arts and cultural purposes with the Artist Overlay District, but none of the projects featured in this thesis made use of the overlay as-of-right— instead, decisions about artist live/work space required extensive engagement

with City officials. The fact that Lowell has been committed to closely regulating the use of each building has perhaps had more of an impact on the creation of cultural facilities in mills. For example, Lowell's Downtown Mixed-Use District ensures that the mills and buildings downtown do not all become one use (like housing), which impacted Mill No. 5's decision to become a cultural space.

Lawrence, on the other hand, has been much more permissive with its zoning. Once the City passed the Reviviendo Gateway Overlay District, all land uses have been allowed in the historic mill district, which has spurred the redevelopment of most of the city's previously underutilized mills. The problem here is that without more nuanced zoning regulation, most of the mills are transforming into housing, and there is a fear that many of the existing cultural facilities will eventually disappear to make way for the most lucrative use.

Zoning and Permitting in Lowell

All of the developers in Lowell had some kind of a challenge in obtaining the necessary approvals to complete their adaptive reuse project, but some had a more difficult time than others. The City's inherent role in the PPP naturally paved an easier path for the development project to move forward. While Lowell required Trinity to manage an extensive community engagement process first, as the designated master developer of the Hamilton Canal District, they were then given the right to create the zoning code for the area and develop it as-of-right. This level of control significantly streamlined the review and permitting process for the PPP. Trinity's Goldenfarb explained that this was an unusual arrangement for her firm, and said that Lowell's city government was "very forward thinking" in this regard.

Both of the independent mill owners were able to navigate the complex zoning and permitting process in Lowell using different strategies and assets. Mill No. 5 cited greater difficulties than Western Avenue. However, this could be explained by a difference in the individuals' perception of difficulty, since the process did not seem to be particularly streamlined for either of the independent mill owners.

When Western Avenue first started the process of creating the live/work lofts, the building was just outside of Lowell's Artist Overlay District and thus required a special permit. Lowell's zoning board of appeals denied Western Avenue the special permit at first, partially based on the concerns of surrounding property owners about having residents in an industrial neighborhood. Mill owner Karl Frey eventually succeeded in having the boundaries of Lowell's Artist Overlay District extended to include his mill complex. Using creativity as a resource, Frey and the artists helped the zoning board and surrounding property owners understand that the artists interested in living at Western Avenue would not be disturbed by the industrial nature of the area. These efforts included a curated gallery show of artists' work that spoke to their love of industrial areas, and an addendum to the proposed residential leases that explicitly stated the artists' consent to live close to industry and its side effects. While other mill redevelopers in similar situations might have

felt differently had they had a similar experience, Frey did not describe the process as particularly challenging,

Jim Lichoulas, the developer of Mill No. 5 explained that Lowell's extensive permitting process was laborious and caused the business to lose valuable time and money. On the other hand, Lichoulas credited his relationship with the building commissioner as a factor of success. Since there is often a lot of discretion in the building code, especially for old mills, it was very important for Mill No. 5 that the commissioner allowed for things to be built out incrementally. Since Mill No. 5 could not afford to develop the entirety of the two floors at once, the building commissioner helped find solutions for them which allowed the project to open its doors.

While Lowell's flexibility with zoning helped the creation of multiple cultural facilities in historic mills, the City's strict regulations have also stopped all of the mills from turning into housing-only spaces. The developers of Mill No. 5 and Western Avenue both originally wanted to create only housing in their mills, and Lowell's city officials have used their power to ensure that the mills maintain a diversity of uses that benefit the city overall.

Zoning and Permitting in Lawrence

All of the developers in Lawrence were able to redevelop their mills as-of-right with few restrictions. The Reviviendo Gateway Overlay District relaxed zoning restrictions in the North Canal Historic District, resulting in an increase in adaptive reuse projects. Be that as it may, of the mills in this thesis, this zoning change only affected the CDC's Union Crossing. The independent mill owners built their cultural facilities before the 2003 zoning change, since industrial, light-industrial, and commercial spaces were all allowed prior to RGO's passing. Union Crossing's predominant use as housing was a result of the overlay, but the Island Street Studios portion actually would have been allowed previously since they are work-only. Nevertheless, the studios likely would not have been created had they not been part of the larger mixed-use Union Crossing project.

When the RGO was being debated, the possibility of creating artist live/work studios in some of the mills was emphasized, but has not yet come to fruition. [cxxvi] Some mill owners and city stakeholders worry that the RGO is currently too permissive, as they see most of the previously industrial and commercially zoned space turning into housing, reflecting the market's preference for this more lucrative use (though 10% of housing in the RGO must be affordable). This worry is most applicable for the independently owned mills, since these property owners have less responsibility to act in the best interest of the general public.

Although neither of the two independent mill owners in Lawrence expressed an interest in selling their mill in the near future, one of them did admit that he could see his mill turning into housing once he decides to retire. The same mill owner has already sold one of his mills to a housing developer, and expressed regret that the RGO lacks enough

nuance to help preserve industrial and commercial space for Lawrence's future job opportunities.

Parking Requirements

Parking is frequently cited as a challenge facing adaptive reuse projects involving historic mills because the existing structure often pre-dates the city's current regulations, which tend to be car-centric. The City's stance on parking requirements and willingness to be flexible with them can significantly impact the ability of a mill to be redeveloped, especially since developing parking can be prohibitively expensive. In these cases, the PPP and the CDC were able to successfully collaborate with the City to find a solution for over burdensome parking requirements. In the PPP's case, the City of Lowell helped to negotiate a land-swap deal for off-site parking. In the CDC's case, it was actually the lender that wanted to hold the CDC to a high parking requirement, but the City of Lawrence helped the CDC to negotiate the lender down.

In the case of one independent mill owner, Lawrence's parking requirements and the mill's location on space-constrained island have kept him from being able to pursue the idea of artist live/work studios, since they would require more parking. The developer did not mention any relevant conversations he has had with City officials about this issue, and it is unclear whether the City would be able to work with him on finding a solution. However, Jess Martinez, the Transformative Development Initiative (TDI) Fellow that has been assigned by MassDevelopment to work with Lawrence confirmed that parking is a major reason why the RGO has not led to the creation of artist live/work housing, and that the City does not currently have the capacity necessary to address the issue. In fact, the City recently exacerbated the problem by allowing development to move forward on one of the only parcels of land in the mill district that would have been suitable parking space for many of the mills on Canal Street.

As evidence that Lowell realizes that minimum parking requirements constrain all types of development, they have included the goal of replacing "minimum parking requirements with more progressive parking regulations" in the Sustainable Lowell 2025 Plan. Lawrence TBD, the recent urban renewal plan put out by the Lawrence Redevelopment Authority includes a goal of developing "one or more structured parking facilities to support downtown and mill development."

Creating Cultural Facilities

Many developers interviewed for this study were challenged by the logistics of creating cultural facilities in particular. Most had not had any prior experience developing for this type of use, and thus they used a variety of strategies to learn how to design and build

for creative tenants. Most developers engaged directly with artists and makers to inform the development of their space, others hired consultants, and still others worked independently. Furthermore, there was some discussion about making sure that the condition of the mill is an appropriate match for the specific type of cultural facility it is being used for.

User-Led Design

The PPP's strategy for the use of the Appleton Mills rose up out of the nine-month community engagement process they undertook with Lowell residents. Trinity had repeated meetings with an arts-focused working group that spun off from the larger community meetings, and these interactions helped to inform the design for the live/work lofts. Taking the artists requests and needs into account, Trinity included features such as the roll-up doors on the ground level that allow for artists to turn their apartments into retail spaces during open studio events, and the wide-open atrium gallery that provides a space for artists to regularly show their work. The involvement of professional architects and designers in this project was also key to realizing the vision for this mill.

Almost all of the independent mill owners/developers also engaged directly with artists and other creative professionals during the process of adapting their mill for arts and cultural purposes. While their community engagement processes may not have been as formal as the PPPs— and they generally did not hire teams of designers and architects— soliciting the artists' feedback at the development stage allowed the independent mill owners to ensure that the spaces they were creating would be able to serve their intended tenants' needs. Many of the independent mill owners were also able to cut costs by leaving their spaces raw until they came into contact with interested artists who provided input about what they were seeking, and then the mill owner would adapt the space as requested.

Professional Consultants and Institutional Partners

The CDC, on the other hand, credits two professional consultants that helped navigate the process of creating cultural facilities. While the CDC always undergoes extensive community engagement processes to inform development projects (such processes affected their decision to create cultural space), the Island Street Studios project was born out of happenstance, and a need to fill a void left by a tenant who had committed and then fallen through. While the consultants helped the successful completion of the project, the facilities may have found a stronger artist audience right off of the bat if more artists had been involved in the development process. When asked whether the CDC would consider developing cultural space in the future, Andors mentioned that they would need a strong institutional partner in the arts and culture sector to help drive the development strategy, as well as the fundraising and operations.

Not All Mills Are a Match for All Cultural Facilities

The design of many historic mills is often a natural fit for cultural uses. However, different types of cultural facilities often require different types of structures, design strategies, and levels of investment in the redevelopment. Most historic mills can often serve the needs of working artists and makers with minimal renovation. On the other hand, spaces that are going to be open to the public, such as galleries and education centers, often require more extensive redevelopment in order to provide appropriate restrooms and elevators, not to mention adhering to ADA standards.

The size of the mill also plays a role in determining which kind of cultural facility might work best, though this also can depend on the budget and availability of tenants/audience more than anything else. In general, larger mills are typically well-suited for production based on the amount of space required for equipment and work. Smaller mills might make more sense for a variety of consumptive spaces, especially when considering the higher standards for renovation that are needed. In addition, interior design considerations, such as existing columns, window height and density, and room partitioning should also be considered.

Despite the higher standards for consumptive art spaces over productive ones, every one of the mills in this study incorporated some type of consumptive cultural facility into their mill. Beyond that, there were two artist live/work projects, one created by a PPP and one created by an independent mill owner—but both are in Lowell. These cases also included three work-only studio spaces (Western Avenue has both live/work and work-only), and these were created by the CDC, and by two independent mill owners. Two of them are in Lawrence, and one was in Lowell. There are also two completely public-facing, consumptive cultural facilities examined in this thesis, both by independent mill owners, with one in Lowell and one in Lawrence. Considering this spread, there are no discernable patterns to be analyzed based on city or developer type. All mill redevelopers must assess the mill's size, age and condition, interior design, as well as their budget before deciding which kind of cultural facility to pursue.

FUNDING

All mill redevelopers face the challenge of supporting their project financially. This section explains the different factors that influenced the developers' ability to purchase and redevelop mills into a space that includes cultural facilities with a focus on relative access to public subsidies. In addition, this section also dissects the different reasons that these developers pursued arts and culture as a use for their building, and how financial considerations played a role in their decision making.

Financing the adaptive reuse project was arguably the most significant challenge that every developer faced. The historic preservation and programmatic aspects of these projects added additional layers of complexity to the financing.

The PPP and the CDC had the benefit of using many different publicly financed development incentives and subsidies, and interviewees from both teams said that their project would not have been possible without them. in general, the private mill owners did not use publicly funded development incentives or subsidies. Western Avenue was the one exception, but the overall value of those subsidies was far lower than those used by the PPP and CDC. In general, it was clear that most of the privately developed cultural facilities were made possible by personal wealth that was accumulated from family or other more lucrative real estate projects.

Complicated and Limited Nature of Public Funding

The process of obtaining and using tax credits and other types of public subsidies is known to be complicated—especially when there are multiple different kinds involved—which may be a reason why most of the privately owned mill projects did not make use of them. The PPP and the CDC's relative proximity to the public sector gave them greater knowledge of the subsidies' existence and easier access to them. In the PPP's case, for example, the Lowell congressional delegation helped Trinity secure a significant amount of financing. In addition, PPPs and CDCs usually have larger teams, allowing them to navigate the bureaucratic systems and strict requirements more easily. For instance, both the PPP and the CDC used professional consultants to help them to handle the tax credit process, among other challenges that faced their adaptive reuse projects. This may be somewhat of a chicken and egg issue though, because the PPPs and CDCs are often taking on mill redevelopment projects that are far more expensive and challenging than others, necessitating City involvement in the absence of interest from the free market.

One factor that explains the greater access to resources that PPPs and CDCs might enjoy when it comes to mill redevelopment, is that the mills these groups are redeveloping are often more damaged than the mills bought and redeveloped privately. In these cases, significant subsidies are often necessary because the cost of rehabilitating the structure would be too high to attract a developer otherwise. However, qualifying for the Historic

Tax Credits is still a complex endeavor. Trinity's Goldenfarb explained that the deft restoration of the mill was critically important for the financial model of the Appleton Mills, because there are strict requirements tied to a developer's ability to access Historic Tax Credits. Goldenfarb elaborated, "If we destroyed those walls, or if they collapsed, we would have been ineligible for the historic tax credit, because a certain percentage of the historic fabric of the building needs to remain in order to qualify for them."

However, when they are able to be accessed, tax credits make a huge difference in the financial feasibility of adaptive reuse projects. Peter Aucella, Lowell National Historic Park's former Assistant Superintendent, believes tha the redevelopment of historic properties can sometimes be easier to finance than new development. In an article published by The Lowell Heritage Partnership about the Appleton Mills, for example, Aucella is quoted as saying "A prominent national mill developer recently told me that historic buildings like these are easier to do in this economy (due to the use of historic tax credits) and that we would see greater challenges to new construction. That is proving to be true in the Hamilton Canal District."[cxxvii]

Flexible Investors

Adaptive reuse projects are typically considered risky by investors due to their complex nature, and cultural facilities are generally thought to be even riskier due to their specialized nature and relatively low return on investment (ROI). In order to make these deals work with tax credits, developers need to find especially flexible and risk-tolerant investors. Both the CDC and the PPP emphasized the key role that their positive relationship with a major investor played in the success of the project. The one private mill owner who used tax credits also cited his investor as a major factor of success.

More Funds for Housing

Interestingly, the projects that used tax credits were the same projects that incorporated housing into their facilities. In the case of the PPP and the CDC, this was no coincidence — both of these development entities explained that the use of Low Income Housing Tax Credits (LIHTC) was a key factor of being able to redevelop the mill. Both projects also used the Historic Tax Credits, and the effect of bundling these subsidies was crucial for their success. Yet, a ramification of creating housing in historic mills is that it subjects the project to higher environmental standards, which can also increase the cost. Both of the projects that used LIHTC were also were in need of significant environmental remediation, but both projects also received Brownfields grants from the Environmental Protection Agency.

Most private developers mentioned that there are more development incentives and subsidies (such as LIHTC, as well as soft debt and grant programs) to support the creation of housing over other types of uses.[cxxviii] Multiple interviewees from both cities

recommended that city and state officials should work to create more financing mechanisms to support different types of industrial, commercial, and institutional development in former mills (and other buildings) to support a diversity of uses, including uses related to arts and culture.

Although many of the independent mill owners were not able to obtain public funding for their adaptive reuse projects, some of them were able to access alternative streams of funding by housing nonprofit tenants. The Cultural Facilities Fund run jointly by MassDevelopment and Massachusetts Cultural Council provides grants to cultural nonprofits explicitly for building renovations and repairs.

Some Cities Have Less Resources

Depending on the City, sources of public funding can be more or less limited than others. Interviewees in Lawrence brought up the limited amount of public funding available for economic and community development initiatives—including mill redevelopment and the arts—more often than interviewees in Lowell did. While Broomfield applied for city funding for live/work artist studios at the mill at 250 Canal, he was denied and told that the funds went to another arts-focused project.

There was also the feeling that with limited funding, arts and culture is not as much of a priority in a place like Lawrence. For example, LCW mentioned that they could have applied for Community Development Block Grants to further support the Island Street Studios, but Andors was sensitive to the fact that if LCW received those grants for this project, it would have meant that other, potentially more urgent needs in the community would have gone unmet.

Flexibility as a Trade-Off

Many of the private developers noted that taking public money often does not allow you to be as flexible nor as patient as you often need to be when creating cultural facilities. Furthermore, some said that public sources of funding can result in a loss of control over aspects of the vision for the space. All of the independently redeveloped mills share in the fact that they were built out incrementally, and gradually grew into what they are today. Multiple private developers named this ability to be flexible and patient as key factors of success, since they were able to be experimental and test various concepts to see how artists and creative professionals would respond. This also gave them the ability to customize various aspects of their space for interested tenants, providing them with a competitive leg-up over other cultural facilities.

Instead of a labor of love, LCW's decision to create studio space was born out of the necessity of quickly finding a way to use the New Markets Tax Credits they had been allocated for the originally intended use in order to avoid financial ruin. The CDC's Island Street Studios thus had to complete their development on a tight schedule to get their

investors paid back, which in part influenced the creation of spaces that were not especially attractive to the area's artists. This resulted in a multi-year lease-up period, ostensibly influencing LCW to relax requirements for renting the space to include other commercial tenants not involved in the arts.

A Passion for the Arts

Most of the independent mill owners admitted that arts and culture is rarely the most lucrative real estate use, but that it can pay off in other ways. The most common answer from independent mill owners when asked why they decided to create cultural facilities in their mill was that they are passionate about the arts. These developers explained that they viewed at least some part of their work as philanthropic in nature, and they either felt a personal commitment to supporting artists, or to contributing to the arts and cultural environment in their city.

The idea that these facilities are doing much more than generating profit came up often. One artist interviewed in Lawrence believes that one of the city's greatest assets is that "there are mill owners here who really get [the need to support the arts]." About mill owner Chet Sidell, she said:

He made money, he needed to make money. But he also saw this reason and responsibility to give back by encouraging other places to thrive. Arts centers, studio spaces, nonprofit organizations—all of these places make community. They build community because they are doing something other than just generating a profit.

Contrastingly, the interviewees from the PPP and the CDC did not mention a personal love for the arts as a motivating force in their decision making. The arts uses in their cases were largely the result of community engagement processes. LCW's Andors did bring up the idea that arts and culture contributes to the vibrancy of the community, but it was not emphasized nearly as much as in the interviews with private mill owners. One reason for this might be that the PPP and CDC interviewees were speaking on behalf of a larger organization, and therefore not as likely to discuss personal values or motives behind a project. In addition, the organizational representatives do not have as much of a personal stake in the profit generation of a project in the first place, and especially in the CDC's case, each project they take on is done explicitly to benefit the community.

Low Maintenance Artists and Cultural Workers

Although the arts may not provide as large of an ROI as other uses such as market-rate housing or high-end office space, most of the private mill developers explained that adapting their mill for artists and arts organizations was worth it to them because these tenants did not require extensive renovations or upgrades to be made to the mill building. Historic mills are often a natural fit for artists and exhibition spaces due to the large floor

plates, high windows, and expansive windows that let in copious amounts of natural light. One artist explaining why the mill at 250 Canal Street is perfect for artists said:

"The top floor is double high, and it has windows that go up almost like skylights. It's totally wide open, it has no walls. It's massive space. It's not fancy. It's such amazing space for artists because the light is so beautiful. It's just the perfect environment, the kind of space artists really need."

The raw industrial feel of the buildings is especially attractive to artists looking for permission to make a mess, so the decision to leave the space less finished can have the dual benefit of attracting artists and helping the owner's bottom line. Plus, the costs saved by the owners are often parlayed into cheaper rents for the artists and creative professionals, which is vital to serving these types of tenants.

In fact, one artist that was interviewed explained that the art spaces developed by the CDC were actually overdeveloped for an artists' needs and felt too fancy to be comfortable working in. Although artists can leave a mark, private mill owners mentioned they are typically gentler on the building than many other manufacturing or industrial-type tenants, which can save the owner costs associated with upkeep in the long run.

Adjacency Value and Cross Subsidization

Some independent mill owners justify the expenses of building cultural facilities in their mill by recognizing the value that these facilities can bring to surrounding properties. A few mill owners featured in these case studies own other types of property nearby their culture-focused mill, and believe that the cultural facility is helping to raise the property value of buildings around it. One independent mill owner advised others who are interested in redeveloping mills into spaces for arts and culture to "Look at it as an economic driver, and a way to change your landscape and neighborhood in a positive way and build value amongst other types of assets." However, he also mentioned that there is no reason these projects cannot be financially sustainable on their own and emphasized patience, saying that developers need to be "in it for the long haul and for the right reasons." While the CDC and PPP did not explicitly mention the adjacency benefit on other properties, both of these development entities also own other types of properties near their culture-focused mill.

Furthermore, a couple of independent mill owners built in other types of commercial uses into their building, such as brewery/taprooms, in order to cross-subsidize the arts tenants. However, it's also true that the arts tenants are likely helping to drive business to those commercial tenants as well, so the benefit is flowing both ways. Yet in many cases, the development of consumptive cultural space such as a museum, gallery space, or a theater that can draw foot traffic often necessitates philanthropic funding. In smaller postindustrial cities such as Lowell and Lawrence where poverty rates are still relatively high, arts and culture patrons are especially hard to come by, which is a limiting factor for this strategy.

THE TENANTS

All mill redevelopers face the challenge of finding artists and arts-focused tenants to use their cultural facility. This section examines the various ways that mill owners located and attracted these tenants, including through city-led processes. In addition to more formal community engagement processes, this section also looks at the ways in which the existing creative community were involved in the mill redevelopment effort. Finally, considering that cultural facilities and workers often require additional effort to help realize their value as an economic and community development asset, the successes and inabilities of developers and city officials to provide the requisite support to achieve this goal are also explored.

In order to have a cultural facility, developers and mill owners must be able to find and attract artists and arts-focused professionals to their space. While the section on the challenges of the physical mill building explained how various mill owners engaged the creative community to inform the design of their project, the question remains – how did they come into contact with those artists in the first place? While in some cases the City helped the mill owner connect with local artists/arts professionals, other mill owners utilized the old fashioned method of hanging a sign on their building or putting an ad in a newspaper to raise awareness about their facility. In most cases, once the mill owner connected with a few artists, information spread through creative networks by word-of-mouth to help grow the tenant base.

City Connections

Both of the mill owners who credited the City with helping them find artist tenants were in Lowell. Public documents also show that local government has tried to help the third mill owner in Lowell who did not explicitly credit the City with assistance in finding tenants.

Cities typically have more power to reach residents and convene people around development plans. In Lowell, the PPP used this system to their advantage, which helped them make contact with an initial group of artists. However, the work did not stop there. Trinity's Goldenfarb emphasized the time and resources that were put into extensive outreach efforts to artist communities prior to the building's opening. These efforts are partially explained by the PPPs relatively large amount of resources, but also because the project, having used substantial amounts of public money, was under more pressure to fill the building quickly than independent mill projects that built out more gradually.

The owner of Lowell's Western Avenue was put in touch with his initial group of artists by city officials when he approached them about needing to fill his mill building. Though the City pointed him in the right direction, it was on him from there, and he explained the considerable effort that was needed to build trust with the local artist community before

they were interested in taking part in the project. Once the trust was there, however, word spread quickly by word of mouth and the group grew quickly from the initial group of 30 to about 300 artists. Mill No. 5 may have ended up finding tenants on their own, but Lowell's semi-annual downtown vacancy report from 2017 also provides evidence that city officials have been involved in efforts to help Mill No. 5 fill vacant space as well.[cxxix]

While mill owners in Lawrence did not mention city-level support in finding arts tenants, at least one independent mill owner said that he used resources provided by the state, such as CreativeGround run by the New England Foundation for the Arts, and SpaceFinder Mass run by the Massachusetts Cultural Council to advertise his space. An internet search revealed that all six of the cultural facilities in this report are using either or both of these state-level services for publicity support.

A City's Existing Creative Community

In both of the examples mentioned above, the City of Lowell helped mill owners connect with local artists. In Lawrence, the City may not have directly helped mill owners find artists, but the mill owners still connected with artists and creative professionals, many of whom were already residing in Lawrence. One independent mill owner was inspired by his personal friendships with the founders of the Essex Art Center and offered them space in his mill, leading to relationships with other artists and arts non-profits. Another independent mill owner hung a sign on his building and put an ad in the newspaper, and the artists found him. Once he rented space to an initial group of artists, word spread, and he has had a steady flow of artist and maker tenants since then.

One commonality across most of these projects is that the mill owners started with a group of artists that already lived in their city. Though artists from outside Lowell and Lawrence use these spaces as well, many of these facilities primarily rent to locals, and it was the engagement of the existing creative community that got these projects off the ground. Trinity's Goldenfarb explained, "Part of the reason why this worked was because there was this community support and an existing artists community. It's not like if you build it, they will come necessarily. The artists were already attracted to Lowell before we came on the scene."

These examples serve as proof against Richard Florida's widely criticized strategy of trying to attract artists and other creatives from outside of a struggling city to revive it. Most of the time there are artists, makers, and other creatives within a city that have not been given enough support or space to thrive. While it does not have to be an either-or situation, it's also important to recognize that many traditional definitions of artists and creatives are exclusionary and outdated, and beyond (but including) reasons of social justice, development strategies that seek to include and lift up the talent that is already present in a city is crucial to the economic prosperity of that place.

The CDC has been the least successful at engaging Lawrence's creative community, which has affected their ability to fill their studios with artists and makers, local or otherwise. When Island Street Studios first opened, almost none of the artists renting space

there were from Lawrence. There are many reasons that could have been the case, including that the rent was too expensive for local artists, or that all of the local artists who can afford to rent separate studio space were already being served by other places. Management of the Island Street Studios has been outsourced to a professional company, which may have affected the space's draw for local artists as well, since there may not be as much of a personal touch. As has already been emphasized, the unexpected decision to create artists' studios also limited the advance planning and engagement that was able to happen before these studios were built.

However, Andors confirmed that LCW has recently been attracting more artists from Lawrence from the surrounding area. The CDC has been in close contact with neighboring arts institution Essex Art Center to raise awareness about their studio spaces. LCW is also engaged with Lawrence's arts community directly through their program Movement City (though participants are typically under 18 and therefore not yet eligible or likely to rent studios).

Artists and Creative Professionals Require Support

One overarching challenge faced by most of the developers was the amount of administrative support that cultural tenants need if they are to provide the added value that many believe the arts can bring to a place. As described in previous sections of this analysis, arts and cultural uses are often thought of as an economic development investment— in other words, they are thought to add additional value to a place beyond their rent and/or tax payments, or even their contribution to local commerce. For example, in the literature review, Markusen and Gadwa explain that supporting the arts can help to revitalize a place by adding vibrancy that attracts and retains residents as well as new investments, and supports a higher quality of life by creating opportunities for community bonding.[cxxx] This is all well and good, but as Markusen and Gadwa also emphasize, these benefits will not materialize on their own. Not only does it take a lot of work to attract and service creative tenants, but if developers are hoping for these added benefits (such as increased value in nearby property), and cities are hoping they will help to add vibrancy to the area, then additional resources must be in place to support public-facing activities.

Public-Facing Activities

Most developers interviewed, regardless of their organizational structure, expressed a need for help in supporting more coordinated, public-facing activities, and a desire to dedicate more resources towards supporting their creative tenants.

Independent mill owners in both Lawrence and Lowell, and the CDC, spoke about wanting to have more events such as Open Studios, and about wanting to coordinate with other artists and cultural organizations in the city to increase the multiplier effect.

However, managing events like these require additional staff capacity and skills that are often beyond the scope of the mill owners' role. Both the PPP and the CDC have professional organizations to manage the property in general, but they do not have staff people assigned to specifically manage artist relations and events. Regardless of the size of their staff, most independent mill owners emphasized the large amounts of personal time these projects require, and the personal commitment and sacrifice they must put into them to keep them going.

The size and type of the cultural facility seemed to have a more significant effect on its ability to self-organize events than the organizational structure or city context. For example, Western Avenue and Appleton Mills each have over 100 artists on site, and they are able to manage regular open studios events and on-site galleries using volunteers. The ability of the artists at Island Street Studios and 250 Canal has been more variable, which is explained by their smaller size. The independently owned mills that are more public facing in nature (Mill No. 5 and 56 Island Street) regularly hold their own events, but still wish for greater support with city-wide programming due to limited staff capacity and the scope of their services. For example, The Essex Art Center has taken on the task of organizing Open Studios weekends for the city in the past, but explained that it was a lot of effort to try to coordinate everybody because there wasn't even an email list in place, nor was there a map of where these places are." She continued on to say that "Lawrence has a lot of potential, but nobody's really owned the task of trying to get everybody coordinated."

City Investment in the Arts

Many suggested that city government should take up the mantle of helping to coordinate these types of events, since it could help add to the city's reputation and overall quality of life. Though some people think they could be doing more, Lowell already has many support systems in place to help coordinate and promote arts and cultural activities. Lowell has invested in creating a city-level arts department and has local nonprofits, such as the Cultural Organization of Lowell, leading broader efforts to support the city's arts and cultural assets.

Lawrence, on the other hand, does not currently have any city employees assigned to support the arts and cultural sector. As is often the case, cities with less staff capacity and funding and plenty of other pressing issues aren't able to prioritize nurturing the arts and cultural community. Though there is the nonprofit organization Arts Lawrence, it is more of a network of arts professionals in the city, and does not have much staff capacity or resources of its own.

Anchor Institutions

Another influential factor affecting the level of support that cultural facilities receive in a given city is the presence of anchor institutions. The fact that Lowell is a city with multiple

anchor institutions while Lawrence does not have any came up in most of the interviews with stakeholders in both cities. The PPP directly acknowledged the catalytic role of the Lowell National Historical Park on the city's ability to support the project and the development of the Hamilton Canal District overall. Independent mill owners in Lowell echoed this sentiment, and also brought up the influence of UMass Lowell on the city's reputation and tourist industry, which helps draw visitors into their facilities.

In general, the mill owners in Lawrence expressed that their city's reputation has been steadily improving and does not currently pose a significant challenge. Nonetheless, multiple people mentioned that the presence of an institutional anchor such as Lowell's national park that would attract visitors to Lawrence would be helpful to the sustainability of local artists and cultural organizations. Many also mentioned that the presence of an arts-focused institution more specifically could help tie the disparate pieces of Lawrence's arts and cultural happenings together in a way that would make the sector more vital. Lawrence Community Works' Director also noted that without a local institutional driver, the CDC feels it lacks the sufficient knowledge and staff capacity to take on the development of another cultural facility in the city.

URBAN DESIGN + MASTER PLANNING

Many of the culture-focused adaptive reuse projects in Lowell and Lawrence also faced challenges related to the city's urban design. While this topic is somewhat outside of the scope of this thesis since it relates more to the ongoing sustainability of these facilities than their initial development, urban design was brought up by many independent mill owners as a key challenge. Most of the relevant comments were about a lack of connective infrastructure and a lack of activity in the nearby downtown—both of which impact consumptive spaces more than productive spaces, since the latter rely on their ability to attract an audience. Notably, neither the PPP nor the CDC expressed concerns in this area. This might be because both the PPP and the CDC's buildings are primarily residential and productive, and thus rely less on foot traffic than a space such as an arts education center or a gallery.

Connectivity and Downtown Development Affect Foot Traffic

Multiple independent mill owners discussed the lack of foot traffic their mills receive, and the negative impact that this has on the cultural facilities. The inadequacy of connective infrastructure is one element that contributes to this problem. For example, Western Avenue remains disconnected from Lowell's downtown, which hinders its ability to attract local and out-of-town visitors. Plans to integrate the complex into the urban fabric with a pedestrian bridge seem to be stalled.

Another reason for low visitation may be an underdeveloped downtown. Many of the mills studies in this thesis are located in walkable downtown areas. However, when the surrounding commercial corridors do not have enough amenities to draw customers, that can have a negative impact on the ability of a cultural facility to attract an audience. For example, Lowell's plans to develop the downtown partially inspired developer Jim Lichoulas' confidence in the idea for Mill No. 5, but many of those plans have since stalled, resulting in a lack of the foot traffic Lichoulas was counting on for support. In fairness, Mill No. 5's ability to attract foot traffic is further hampered by its location on the 4th and 5th floor of the building.

The cultural facilities in Lawrence are experiencing similar issues. The organizations and businesses in the mills are negatively impacted by the lack of activity along Essex and Merrimack Streets, the city's main commercial corridors. All of the Lawrence mills in this study are clustered in the North Canal Historic District, which is well connected to the downtown by a pedestrian bridge, but neither area sees much foot traffic. While this issue is somewhat vexing given the large amount of new residential development that has been built in the area, it can be partially explained by the lack of vibrancy along the nearby main streets.

The Insularity of Mills

Developments within massive mills can have negative ramifications for public space when residents and workers have all of their needs met inside of the mill complex. In some cases, redevelopment of mills might exacerbate a city's struggles with downtown activity and not the other way around. The residents who are living in the newly redeveloped mills in Lawrence may have all of their needs served by amenities such as restaurants and laundry facilities that are also located inside of some mills. Since most of the residential mills are located directly next to the commuter train, and many people still own cars, this further reduces the need of residents to walk around in Lawrence's downtown.

Since mills are such large buildings, if everything is located inside of them the effect can be akin to a city with multiple malls and no main streets. To guard against this outcome, cities should work to revitalize commercial corridors in tandem with the mills, but not instead of them, which can be difficult for a city with limited resources. Mills should also be redeveloped to include accessible street frontages when possible.

The Impact of Master Planning

While both Lowell and Lawrence are facing similar challenges related to the vitality of their public realm and the ways in which it impacts the viability of culture-focused adaptive reuse projects, the cities have historically approached this issue in different ways. Typically, comprehensive master plans put forth a vision for the ways in which singular development projects relate to each other and connect throughout the city. In short, a master plan is a largely a proposal for the overall design of the city. The differences between Lowell and Lawrence's physical fabric and the ways in which they impact the adaptive reuse projects at hand are affected by their different approaches to master planning.

Lowell has put a significant amount of resources into comprehensive master planning, while Lawrence does not currently have a master plan. Lowell's current city-wide master plan is called Sustainable Lowell 2025, but it has a multitude of other plans for specific parts of the city. Between the Jackson Appleton Middlesex (JAM) Urban Revitalization Plan and the Hamilton Canal District Plan (which sits mostly within JAM's boundaries), the Acre plan, the Ayers City Industrial Park plan, and more, Lowell may actually have too many plans. On the other hand, Lawrence does not currently have a master plan for the city, and it has not had one for decades. However, it recently released a fairly comprehensive urban renewal plan called Lawrence TBD focused on economic development, job creation, improved quality of life, and fiscal stability. One major difference between this urban renewal plan and a master plan, however, is that it does not focus on plans for many specific sites throughout the city, but rather puts forth overarching goals and ideas.

Tellingly, the concept of a master plan came up much more frequently in interviews with Lawrence stakeholders than with people in Lowell. While all of the adaptive reuse

projects in Lowell have undoubtedly been influenced by the various master planning processes (most recently the Appleton Mills), it is the zoning that resulted from the master planning processes that is frequently mentioned now. In Lawrence, on the other hand, people expressed that the lack of a master plan represents a lack of vision for what the mill district, downtown, and the rest of the city could be. Related to sentiments that most of the mill redevelopment is now being decided by the market and turning into housing, many maintain that the existing industrial and commercial uses – including arts and culture— would be easier to preserve if they had been the result of a planning and zoning process. While Lawrence TBD highlights the community's desire for more platforms for arts and culture, it stops short of identifying sites for these uses and issuing RFPs, which impedes the City's ability to realize the community's desires. As a result, many of Lawrence's cultural facilities are left vulnerable to the fluctuations of the market and the desires of individual owners, while Lowell's are better protected in the long-term through planning and zoning.

CHAPTER 7: CONCLUSION

This section provides a conclusion that summarizes the information and analysis of the six case studies of the culture-focused adaptive reuse of historic mills in Lowell and Lawrence examined throughout this thesis. Following the conclusion, I reflect on the limitations of this study, and recommend areas for future related research.

Following this chapter, I offer three sets of recommendations for three separate audiences (including government officials, mill owners and redevelopers, and artists and supporters of the arts) who may be interested in advancing the development of cultural facilities in historic mills. While these suggestions are based on my experiences with historic mill redevelopment in Lowell and Lawrence, they are meant to be applicable to many other postindustrial cities in Massachusetts, the greater New England Region and beyond. In addition, while mills are unique architecturally due to their size, history, and urban design context, these recommendations may also be useful for a variety of other adaptive reuse and historic preservation projects across the country and the world.

CONCLUSION

Examining the process behind the adaptive reuse of six historic mills in Lowell and Lawrence for cultural facilities reveals the complex nature of these projects, and the importance of public-sector support for their success and sustainability. Existing city policies, plans, and programs, as well as the involvement of city officials, have impacted the way that mill revitalization has been handled in each city. Different types of developers—including public-private partnerships, community development corporations, and independent mill owners—encountered similar challenges across three main categories, including the physical mill building, funding, and arts-focused tenants. Each mill redeveloper overcame these obstacles in different ways and to various degrees. However, I found that PPPs and CDCs generally work more closely with local government officials than independent mill owners, allowing them to navigate the redevelopment process with relative ease when compared with independent mill owners.

The specific context of each city played a major role in the mill redevelopment process. Lowell generally has a more robust public sector than Lawrence, and has succeeded overall in using planning and policy tools to explicitly link and guide the reuse of its mills for arts and cultural purposes. However, there are still improvements that the City can implement to make the process easier and the outcomes stronger for different types of developers. Though the PPP gave high praise to the City's role in the Appleton Mills project, independent mill owners had more varied accounts, and the City could increase

efforts to provide support systems for projects such as Mill No. 5 and work on improving infrastructure to better connect Western Avenue to the downtown. Moreover, interviewees and recent newspaper articles foregrounded concerns about the uneven development pattern across Lowell, and suggested the City increase efforts to pursue projects aimed at economic and community development for underserved neighborhoods. While these efforts can include cultural facilities, most of Lowell's mills have already been converted, thus other types of building stock should be considered.

Lawrence shows that an engaged nonprofit sector and committed residents can mitigate the challenges of a weak city government, but permissive zoning policies and a lack of support systems threaten the existence of the diversity of uses in Lawrence's mills, including cultural facilities. While most interviewees shared that the City was not involved in reuse projects, the CDC received relatively more support than independent mill owners. Furthermore, efforts have not yet been made to connect mill redevelopment strategies with support for cultural industries. Interviewees in Lawrence expressed general enthusiasm for the idea of a more robust cultural sector and related mill reuse projects, and shared anecdotes of other residents and community groups that felt similarly. However, others made clear that they are not sure arts and culture should be a priority of Lawrence's given the city's other pressing needs and fears of displacement.

Though monumental projects such as MASS MoCA are often held up as the only examples of what successful adaptive reuse for the arts looks like, this study shows that this idea can take many forms and sizes, each with a benefit for the city's economy, community development, and the quality of life of its residents. Beyond Lowell and Lawrence, the revitalization of historic mill buildings across Massachusetts and New England remains a top priority for many mill towns and cities. This study has provided an in-depth look at the reasons, strategies, and considerations for connecting the historic preservation and adaptive reuse of mills with support for cultural industries. Using the following policy recommendations as a launching point, mill towns and cities can better support the development of cultural industries. Furthermore, given the high concentration of municipalities still struggling to deal with vacant mills and revitalize their economies, officials at the state level are perfectly poised to create a set of guidelines to help postindustrial municipalities reanimate their mills in ways that stimulate economic and community development plans and help to create a more vibrant place for both residents and visitors to enjoy.

LIMITATIONS

Despite my best efforts, I was not able to conduct an interview with city staff in Lawrence. I did, however, speak with Lawrence's Transformative Development Fellow Jess Martinez who works directly with Lawrence leadership to "stimulate an improved quality of life for local residents; and spur increased investment and economic activity."[cxxxi] Martinez explained that there is not currently a city staff person dedicated to mill redevelopment, which may have affected my ability to receive a response to my inquiries. In addition, I

attended a lecture given by Maggie Super Church about her work consulting for Lawrence city government, including her involvement with the Reviviendo Gateway Initiative and Lawrence TBD.

Another limitation of this research was the lack of comprehensive data about the historic mills in Lawrence and Lowell, and greater Massachusetts. A list of the historic mills in each city does not seem to exist, and there are no publicly accessible efforts to track vacancies, redevelopment efforts, or current uses of the mills. Access to this type of data would have allowed closer study of the relative frequency, cost, and success of arts and culture related uses in Massachusetts' mills related to other types of reuse projects in postindustrial cities.

I also faced the limitation that is typical when interviewing people— not everyone was willing to answer all of my questions. For the most part, the people I interviewed were incredibly open and eager to share their knowledge and experiences. However, specific financial data on the redevelopment projects was hard to secure in some cases. Questions about city government and policies were sometimes glossed over, declined, or asked to be removed from the record.

Many interviewees mentioned the importance of project consultants, investors, and members of the creative community as invaluable factors of success for these adaptive reuse projects. Unfortunately, the time limitations on this study limited my ability to speak with all of the relevant key stakeholders. Instead, I focused on the stakeholders who were most closely involved with the mill's redevelopment.

The most significant limitation of this study was the time frame in which it was required to be completed. While I had originally planned on taking a broader look at relevant historic mills across Massachusetts and conducted interviews with other stakeholders in cities such as North Adams, Holyoke, and Fall River, I ultimately decided to tighten the scope of this study and limit it to Lowell and Lawrence. The lessons learned from the additional interviews I conducted impacted my ability to better analyze the cases in Lowell and Lawrence, and I plan to use the deeper body of knowledge about adaptive reuse for arts and cultural purposes in future projects and publications.

FUTURE RESEARCH

This study focused on untangling the details behind the process of adapting mills for cultural facilities, and the way in which local governments can affect that process. Many (though not all) of the questions and issues raised in this paper can apply to adaptive reuse projects in buildings other than mills, and future research could expand to look at the reuse of other types of historic buildings for arts and cultural uses. Questions about how historic community assets are preserved and reused as further support systems of cultural heritage are an important starting point, but future research should examine ways to sustain these facilities, and how these assets serve their communities once they

are in use. The goals of cultural and economic equity should be top of mind, especially when considering the steady increase in populations of immigrants and people of color in postindustrial cities such as Lowell and Lawrence.

More research is needed into strategies that link support of the cultural industries to local workforce development efforts that can create viable pathways to economic success for underemployed residents in postindustrial cities. Of course, this research should not necessarily be limited to the impacts of cultural facilities within historic mills. In addition, consumptive spaces of arts and culture, such as galleries and performance spaces, should also be looked at for whether or not they are employing, representing, and attracting populations that represent their localities, and if not, how they can improve in this regard.

Related to equity, there is currently much discussion in the field of urban planning about the impact that the presence of cultural facilities, artists, and makers can have on gentrification and displacement in vulnerable communities. While these entities are often eventually displaced themselves in the cycle of urban development, more research is needed to decipher the complex relationship between the arts and issues of gentrification, and to develop more sophisticated strategies for development without displacement.

The sheer volume of mill space in many postindustrial cities across Massachusetts is so gargantuan that reusing it is crucial, but the amount of space and its interior nature can have the unintended effect of decreasing the vibrancy of the public realm and exacerbating vacancy problems in the downtown. This pattern was witnessed in Lowell, Lawrence, and many other mill cities and towns across Massachusetts. Future research into strategies for how to balance the need to preserve and adapt existing mills for productive and beneficial uses with the goal of revitalizing downtown main streets is necessary to help these municipalities reach their full potential. Such studies might consider the different types of productive and consumptive cultural facilities with more nuance, along with creative placemaking efforts in the public realm, to glean valuable insights for cities looking to integrate arts and culture into their comprehensive planning efforts.

When faced with the decision about how to best reuse a vacant mill, especially large mills that were once the sole economic engines of the city, many communities face difficult decisions about the opportunity cost of transforming it for one use over another. Though many postindustrial cities are interested in investing in the creative and cultural economy, they often give their largest spaces over to uses such as housing. This often may be the most logical decision in a place with a need for more housing, but it also may be happening solely because of capitalist decision makers that are looking to receive the highest possible rents per square foot. Office space is also a popular and lucrative choice, but while it can accommodate certain types of creative uses, such as graphic design and architecture practices, it may not be able to serve many other types of productive and consumptive cultural space. There have recently been trends of mills turning into agricultural operations, especially to serve recently legalized marijuana

production, and other cases of mills turning into hospitals, hotels, fitness centers, and a supercomputer center. While many precedents suggest that a mixed-use approach could be the best way to incorporate cultural facilities into a historic mill, future research into the relevant considerations, and relative costs and benefits to communities when deciding to use an iconic mill for one use over another would also be useful to decision makers.

RECOMMENDATIONS

The below recommendations are based on the lessons learned from the case studies in this thesis, but can be applicable to other post-industrial municipalities in Massachusetts, the greater New England region, and beyond. Though this study focuses on historic mills, recommendations may be also be applicable to other types of historic preservation and adaptive reuse projects as well. These recommendations are separated into three sections, each intended for different audiences, including:

1. Local government officials
2. Mill owners/redevelopers
3. Artists/supporters of the arts

FOR LOCAL GOVERNMENT

The following recommendations are meant for city and state government officials looking to spur the creation of cultural facilities in vacant or underutilized mills.

General:

- Inventory mill space: Inventory all mill space and create a directory that includes relevant details about each building for both potential redevelopers looking to purchase an empty mill, as well as artists and arts organizations looking to rent space in an occupied mill.

- Mill owner network: Support the development of a network of local and regional mill owners to allow for them to share knowledge about best practices and provide support and advice to one another.

Planning:

- Community engagement: Prioritize community engagement processes that allow residents to voice their opinions about historic preservation and the development of cultural facilities in their city.

- Cultural planning: Create a comprehensive master plan for the city that includes a section for arts and culture, including historic preservation. Either as part of a larger master plan, or as a separate document, cultural planning can serve as a roadmap for strengthening and growing arts and cultural assets.

- Zoning tools: Use zoning tools such as Lowell's Artist Overlay District that can help to incentivize culture-focused adaptive reuse projects. Furthermore, zoning can also help to ensure that an area maintains a diversity of uses, such as with Lowell's Downtown Mixed Use Zone, which can be helpful in preserving cultural space.

- City staff: Create a department in city hall dedicated to supporting the creative economy and advocating for its growth. Examples of this include Lowell's Department of Cultural Affairs and Special Events and Easthampton's City Arts.

- Commercial corridors: Develop plans for the revitalization of commercial corridors in tandem with plans to reuse mills. Be strategic about which types of facilities and tenants should be housed in mill space versus storefront space.

- Infrastructure: Ensure that reactivated mills are connected to the downtown and other parts of the city with adequate infrastructure

Building:

- Permitting: Streamline permitting processes and other bureaucratic hurdles for mill redevelopers.

- Parking: Replace minimum parking requirements with more progressive parking regulations that reduce the need for new parking construction in mixed-use districts where alternative transportation options are readily available.

- Consultants: Establish relationships with reputable culture-focused consultants and help to connect them with mill redevelopers in need of guidance on the process of creating cultural facilities.

Funding:

- Technical assistance: Provide technical assistance to mill owners to help them navigate the process of obtaining and using public subsidies for redevelopment.

- Culture-specific subsidies: Create new tax credit programs or other development incentives that specifically support the creation of cultural facilities.

- Value-based investors: Establish relationships with value-based investors that offer programs such as low-interest loans and have a track record of being flexible and risk tolerant and help to connect them with relevant mill redevelopers.

- Incremental growth: Relax public funding policies to allow developers to build spaces out incrementally and over longer periods of time in order to be able to experiment with ideas that respond to local preferences.

Tenants:

- Artists and cultural workers: Help to connect local artists and arts organizations with mill owners who either have vacancies or who are interested in adapting their space for creative uses.

- Public-facing events: Help to organize and promote public-facing events that bring attention to the work of local artists and cultural workers such as city-wide Open Studios days.

- Promotional Materials: Include all cultural facilities in tourism and promotional materials about the city.

- Regional collaboration: Collaborate with neighboring cities to augment the effects of promoting local artists and arts organizations and expand the reach of tourism efforts. For example, create an art map that extends across Lowell and Lawrence.

FOR MILL OWNERS AND REDEVELOPERS

The following recommendations are meant for mill owners and redevelopers interested in creating cultural facilities in historic mills.

General:

- Government support: Build a relationship with city and state officials in order to take advantage of the programs they have put in place to support adaptive reuse and to make your needs heard.

- Community engagement: Survey the community to understand the types of cultural facilities that residents desire, and the types that already exist. For example, there might already be enough venues for the performing arts, but a need for studio space.

- The value of the arts: Understand that arts and culture has benefits for the community beyond profit-maximization or job creation. Providing space for these uses will help add to the local quality of life, and can also help to improve your city's reputation, which can have long-term and immeasurable positive effects for you and the city.

Building:

- Grow incrementally: Be flexible and patient in your build-out process to test ideas and allow the project to grow more organically over time in response to community needs.

- Mixed-use: Consider integrating various uses into your mill, some of which may be able to cross-subsidize and amplify less profitable tenants, such as a brewery/taproom that attracts people to an art gallery in the building.

- User-led design: Listen to the needs of your future users. Engage with the existing creative community and other residents and allow their opinions to inform the design of your project. In a similar vein, do not overdevelop your space in anticipation that it will be more attractive for creative users. Some users in this sector actually prefer space that is less developed.

- Consultants: Connect with knowledgeable consultants who have expertise in adaptive reuse and in developing cultural facilities.

Funding:

- Public support: Speak with city employees in the arts, planning, or economic development departments who may be able to assist you with public funding for your project.

- Non-profit grants: Take on non-profit tenants who might be eligible for grants related to facility upgrades, such as grants from the Cultural Facilities Fund run by MassDevelopment and the Massachusetts Cultural Council.

- Consultants: Connect with as experts who can help you navigate complex public funding mechanisms such as tax credits.

Tenants:

- Defining artists: Broaden your idea of who you consider an "artist" and look to support the needs of locals who might be culture bearers or creatives in ways other than what you are used to.

- Facilities manager: If you can't personally manage your tenants, make sure you hire a facilities manager who is attentive to the different needs many artists and arts organizations might have.

FOR ARTISTS AND SUPPORTERS OF THE ARTS

The following recommendations (the third set of three) are meant for artists, cultural workers, and other supporters of the arts who are interested in advocating for the creation of cultural facilities in vacant or underutilized mills in their city.

- Organize yourselves: Organize yourselves into larger groups and show up to meetings, call your representatives, and make your voices heard in order to have more influence on city officials and developers shaping the physical fabric of your city.

- Participate: Show up to community planning meetings and advocate for the creation of the types of spaces you want to see in your city.

- Ask the city: Call city representatives and ask to be connected with mill owners who might be able to rent space at a subsidized rate or donate vacant space for temporary uses.

- Network: Connect with other cultural workers in your city and/or in nearby cities to learn about ways they are accessing affordable space. Set up a social media hub for people to share information about available spaces, events, community meetings, etc. both locally and regionally.

- Events as advocacy: Stage temporary placemaking events at abandoned or vacant mills to help the city and developers envision the types of uses that could be sustained there. Ideas include pop-up markets, music, theater, or dance performances, community potlucks, art exhibitions – there are many more!

- Partner: Partner with local non-profits and cultural groups for support with the above recommendations.

Finally, a recommendation for anyone interested in this pursuit:

Have patience and tenacity. Most of the success stories involved key players who refused to let go of their dream, and tirelessly rallied others around them to find unexpected solutions make it happen.

INTERVIEWS

This thesis would not have been possible without the participation of the many mill owners, city officials, cultural workers, and other city stakeholders from mill towns and cities across Massachusetts who shared their knowledge with me. A sincere thank you to all who generously participated in an interview. Although not all of the interviews I conducted are formally referenced in this thesis, each one provided crucial insight on the topic of mill redevelopment and cultural facility creation and served as a backbone for this research.

The following is a list of people whom I formally interviewed for this thesis. I also informally spoke with a number of artists, cultural workers, and residents in the cities I visited during the course of conducting research for this paper.

Lawrence

- Jessica Andors — Lawrence CommunityWorks
- Mike Broomfield — Andrea Management Corporation
- Jess Martinez — MassDevelopment
- Cathy McLaurin — Essex Art Center
- Marianne Paley Nadel — Everett Mills Real Estate, LLC
- Gary Sidell — Bell Tower Management, LLC

Lowell

- Peter Aucella — Lowell National Historical Park
- Adam Baacke — UMass Lowell
- Dennis Frenchman — The Massachusetts Institute of Technology
- Karl Frey — Western Avenue | Studios & Lofts
- Abby Goldenfarb — Trinity Financial
- Jim Lichoulas — Mill No. 5
- Henri Marchand — The City of Lowell
- Paul Marion — UMass Lowell
- Andrew Shapiro — The City of Lowell

Other

- John Aubin — Open Square; Holyoke, MA
- Mayor Thomas W. Bernard — City of North Adams; North Adams, MA
- Duncan Brown — The North Adams Partnership; North Adams, MA
- Asher and Jamie Israelow — Studio for Integrated Craft; Housatonic, MA
- Patrick Norton — Narrows Center for the Arts; Fall River, MA
- Eric Rudd — Artist; North Adams, MA
- Michael Sundel — Mill 180; Easthampton, MA

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