Mastering Mills: Recommendations for Planning Massachusetts Mill Communities

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Carey, Angelica; Burke, Madison; Smialek, Alexandra; and Palmer, Margaret, "Mastering Mills: Recommendations for Planning Massachusetts Mill Communities" (2016). *Center for Economic Development Technical Reports*. 168.  
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Mastering Mills:
Recommendations for Planning
Massachusetts Mill Communities

Draft Approval Date: 07 June 2016
Prepared for John Mullin by:
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1 TITLE PAGE

Title: Mastering Mills:
Recommendations for Planning Massachusetts Mill Communities

Area of Study: Rural mill communities west of Worcester, MA

Brief Description: This paper provides specific recommendations that have been prioritized in an effort to influence state policy that will positively support mill revitalization.

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Date of Report: 07 June 2016
## EXECUTIVE SUMMARY

<table>
<thead>
<tr>
<th>Title of Study:</th>
<th>Mastering Mills: Planning for Massachusetts Mill Communities</th>
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<tr>
<td>Consultants:</td>
<td>Planning (and related fields) professionals, developers, and mill owners</td>
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<td>Study location(s):</td>
<td>Rural Mill communities west of Worcester, MA</td>
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<td>Studied period (years):</td>
<td>September 2015 - April 2016</td>
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<tr>
<td>Purpose:</td>
<td>This paper is meant to summarize the findings and recommendations that came directly from attendees at the “Mastering Mills” Symposium in order to influence future state policies regarding mill revitalization, especially for rural communities.</td>
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<tr>
<td>Methodology:</td>
<td>A symposium was held to analyze topics surrounding mill revitalization. A qualitative analysis was conducted using NVivo® software on data from roundtable discussions held during the symposium. Each table discussion was coded and analyzed to create recommendations for policymakers.</td>
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<tr>
<td>Summary of Results and Conclusions:</td>
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<tr>
<td>Analysis:</td>
<td>An analysis of how attendees responded to the round table discussion was conducted to gain a better understanding of mill revitalization in Massachusetts. Topics that were discussed with more frequency were identified and broken down to understand the specific obstacles and improvements attendees were discussing.</td>
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<tr>
<td>Frequency of Themes Related to Obstacles in Mill Revitalization</td>
<td>![Diagram showing frequency of themes related to obstacles in mill revitalization]</td>
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<table>
<thead>
<tr>
<th>Theme</th>
<th>Number of coding references</th>
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<tr>
<td>Marketing &amp; Advertising</td>
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<td>Definition of Historical</td>
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<td>Length of Process</td>
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<td>Zoning</td>
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<td>Communication</td>
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<td>Lack of Staff</td>
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<td>Building Infrastructure</td>
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<td>Lack of Expertise</td>
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<td>Environmental Issues</td>
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<td>Building Codes</td>
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<td>Funding</td>
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Recommendations:
Recommendations were made for both Obstacles identified and for Suggestions for Improvements. Recommendations for Obstacles were specific items that should be changed or enhanced while recommendations for Suggestions for Improvements were a compiled “top 10” list of suggestions that attendees made during the roundtable discussion.

The following recommendations were provided for Obstacles:

Regarding funding:
- Designate a portion of the available funds (tax credits, grants, loans) to rural communities, which will then compete for funding on an evenly distributed scale.
- Create an application that is feasible for a rural community to complete.
- Designate funds from the Historic Tax Credit to mill revitalization.

Regarding Building Codes:
- Review of the building codes and standards that are used for mill buildings.
- Create a State Standards Guidebook for building inspectors to create consistency of codes across the Commonwealth.

Regarding Environmental Issues:
- Designate a portion of available funding to brownfield remediation and site clean up in rural communities.

The 10 most frequent Suggestions for Improvements made by attendees during the round table discussion were:
- Create a new definition of Historic Mills that better identifies mills in Massachusetts.
- Modify the Historic Tax Credit to list mills as a separate category and not just another historic building.
- Create and designate funding specifically for rural communities that have mills.
- Create a website or community space for stakeholder collaboration.
- Eliminate recreation of the wheel by providing a resource that contains all of the information needed to revitalize a mill.
- Create a Guidebook/Roadmap for anyone who is revitalizing a mill.
- Create a Historical Mill Committee that can be contacted and utilized as an expert resource.
- Inventory all mills in Massachusetts.
- Create a Guidebook of generally accepted state standards for building codes and repairs.
- Pursue further analysis on funding structure, including types of funding available and speed of return on credits and grants.

**Conclusions**

This analysis of expert interviews and data gathered from roundtable discussions during a symposium led to a compilation of problems and solutions for mill revitalization. Specific recommendations, such as training professionals and providing educational and funding resources have been prioritized in an effort to positively influence state policy toward better support for mill revitalization. Making information publicly known and setting up frameworks or roadmaps based on mill characteristics is needed to streamline the project process.

**Date of the report:** 07 June 2016
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## 4 LIST OF ABBREVIATIONS AND DEFINITIONS OF TERMS

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<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>CED</td>
<td>Center for Economic Development</td>
</tr>
<tr>
<td>Listserv</td>
<td>Automatic electronic mailing list server</td>
</tr>
<tr>
<td>Node</td>
<td>Important topic or theme used in NVivo® software</td>
</tr>
<tr>
<td>Rural area</td>
<td>All population, housing, and territory not included within an urban area</td>
</tr>
<tr>
<td>Urbanized Area</td>
<td>Areas of 50,000 or more people</td>
</tr>
</tbody>
</table>
5 ACKNOWLEDGEMENTS

This project would not have been possible without extended interviews, consultation and advice from professionals from across the state of Massachusetts. These professionals ranged from planners and economic developers to mill property owners, development companies, regional planning agencies and conservation agents. Their cooperation has been invaluable to understand the challenges with revitalizing mills in Massachusetts, to enable us to make constructive recommendations for policy and planning for the future. Members from Mass Development, MassWorks, and Massachusetts Department of Housing and Community Development were integral in providing an expanded network of professionals and resources to consult for the symposium.

The team would like to give a special thank you to everyone who attended the “Mastering Mills” Symposium of April 2016, especially the volunteers who helped make the entire event run efficiently. Finally, the team would like to thank John Delconte for his advice throughout the project and Dr. John Mullin for his encouragement and teaching during this research project.

6 CONSULTANTS AND CLIENT ADMINISTRATIVE STRUCTURE

Interviews and symposium attendees included professionals from Massachusetts, Rhode Island, Connecticut, New Hampshire, Vermont, and North Carolina. Attendees shared their expertise from various professional and academic fields, including sustainability, conservation, building and design, utility maintenance, construction and development, business management and administration, regional planning, town or state policy, and economic development. Funding and student volunteers were organized by the University of Massachusetts’s Center for Economic Development (CED), and administrative assistance was provided by the Department of Landscape Architecture and Regional Planning.

7 INTRODUCTION

Many mill properties throughout Massachusetts have been left vacant and have decayed over time, whereas some have received investment and have been successfully redeveloped either into hosts of businesses and/or housing. This report is a culmination of a year-long research project to identify impediments and successful strategies for revitalizing mill structures in communities throughout the Commonwealth. During the first phase of the project (fall semester 2015), individual interviews were conducted with planning professionals, state employees, and developers to identify impediments negatively impacting revitalization efforts in the state. Over twenty interviews were analyzed to reveal
the major themes and topics. In addition, many resource documents and published stories of successful mill revitalization projects were identified during the interviews.

Interview findings of impediments were categorized and ranked. Impediments with the greatest frequency included climate of the state’s economy, navigating historical tax credits, structural form related to building codes and infrastructure, zoning and permitting, and finally ownership and/or partnerships. Fact sheets of the findings most mentioned are included in the Appendices of this report. The interviews showed that experienced owners and developers continue to see success with projects, whereas smaller developers and communities lack resources and/or administration to create successful projects. A lack of shared information, consistent guidance, and stakeholder collaboration has contributed to the struggle that individual mill owners face when revitalizing mills on their own, which has led to missed opportunities and long waiting periods. After completing the interviews, it became apparent that an event was needed in which stakeholders could discuss and share challenges or successes related to their mill properties.

In the second phase of the project (spring semester 2016), our team continued to analyze the interview content while simultaneously reviewing the resources that were offered to us by the respondents. A network of professionals was developed and used for outreach when planning the “Mastering Mills” Symposium. The symposium was the first of hopefully several more in the future, and was meant to bring together key stakeholders involved in mill revitalization projects from rural communities (populations under 50,000, see Methods) throughout the Commonwealth. From the interviews, we learned that much of the existing mills outside of the immediate Boston area have been redeveloped, and that more support was needed for mill properties in the Western Massachusetts area. This, along with the widely different economic market in the western and central portions of the state, limited our geographic focus to rural communities west of Worcester. Addressing problems faced by rural communities became the key mission, because they often have smaller budgets and therefore limited access to resources and professional support.

At the symposium, speakers and attendees provided anecdotal stories along with factual information about grants, policies, and specific mill issues. Many attendees were appreciative that there was finally an outlet for them to share their own frustrations, hear about others, and learn methods to use for mill revitalization. Throughout this project, the team has learned that mill properties can be reused as spaces for economic development while still maintaining their historical structure and legacy. However, it has also become apparent that not all mill owners have the same access and education to the proper resources necessary to revitalize their structures. In the attached reference list, the team has created annotations so that stakeholders can find information on resources in the form of stories, handouts, and grant information applicable to mill revitalization.
This paper is meant to provide clear recommendations for state policy improvements, which were
gleaned from the roundtable discussions that took place at the symposium. Because these
recommendations and resources have been identified by stakeholders, we are hopeful that the state finds
them pertinent as well and will consider funding them.

8 PURPOSE

The purpose of the “Mastering Mills” Symposium was to gather impediments to mill
revitalization throughout the state and to recommend improvement strategies and resources to enable the
success of future projects.

9 GOALS AND OBJECTIVES

This paper is meant to summarize the findings and recommendations that came directly from
attendees at the “Mastering Mills” Symposium in order to influence future state policies regarding mill
revitalization, especially for rural communities.

9.1 GOALS

The goal of this project is to serve as a resource for mill stakeholders and legislators in order to
improve the state of mill revitalization planning to positively impact rural communities.

9.2 OBJECTIVES

9.3 Analyze issues and possible solutions through the NVivo® software package
9.4 Tabulate and rank themes by frequency
9.5 Present findings, resources, and conclusions to inform planning strategies for mill revitalization
9.6 Offer the most mentioned and sensible recommendations that were presented by attendees
9.7 Create a ListServ where information can be shared about mill-related work
9.8 Create a Scholarworks page in which all resources from speakers can be shared with symposium
attendees
9.9 Create a list of resources for mill stakeholders that can be consulted when looking to revitalize
properties

10 METHODOLOGY

The “Mastering Mills” Symposium was held at the University of Massachusetts, Amherst, in
order to gain an understanding of methods that can protect and enhance mill character and the economic
viability of mill communities. There were approximately 100 symposium attendees, which included mill
developers, mill owners, town planners, town building inspectors, and representatives from surrounding
regional planning agencies and community organizations. The symposium was designed to support rural
areas, defined by the United States Census Bureau as those with less than 50,000 people (US Census Bureau); therefore, towns involved in the symposium were located west of Worcester, Massachusetts. Smaller, rural communities are likely to run into more issues concerning their mills due to lack of resources and support.

At the symposium, attendees participated in presentation sessions designed around themes related to mill revitalization. The first session was titled “Lessons in Mill Revitalization for the Town,” followed by “Lessons in Mill Revitalization for Mill Owners,” “Lessons in Financing and Creating Private-Public Partnership Agreements,” and “The Importance of History, Culture, and Design in Mills.” Each session included a ten-minute presentation by a speaker who specialized in the topic of focus. There were also approximately three panelists per session who added their input on the topic discussed; a moderator facilitated time and questions.

To summarize the presentations and encourage more personalized conversations among the attendees, a final roundtable discussion session was created to help identify important takeaways from the symposium. During the roundtable discussion, the attendees, in groups of approximately eight, were asked the question, “What will it take to stimulate and/or change mill revitalization in New England?” Attendees also had the opportunity to offer suggestions for improvement and policy change. Each table, with the help of a designated moderator, identified their top three issues or topics and then presented them to the entire group. Notes were taken by volunteers on both computers and easels, which were then shared with the group as a whole.

The information gathered and entered into the NVivo® software for data analysis. The qualitative analysis of the roundtable discussions consisted of distilling the key discussion points into different coding categories that were based on what was previously learned during interviews and archival research held prior to the event. There was a variety of coding categories. The codes used for the analysis of obstacles faced by the stakeholders included: Funding, Building Codes, Environmental Issues, Lack of Expertise, Building Infrastructure, Lack of Staff, Zoning, Length of Process, Lack of Communication, Lack of Clear Definition of Historic Buildings, and Marketing and Advertisement. For the analysis of suggestions for improvement, the codes included: Educational Information, Administration, Funding, Inventory and Visibility, Building Codes, Academic Research, Recognize Historical Significance, Ownership, Infrastructure, Community Values, Increased Business, Broadband and WiFi, Housing, and Back Tax Abatement.

Along with the sessions and roundtable discussion, a “Mill Checklist” for both mill developers and town planners was distributed to determine the preparedness of individual towns to support mill revitalization and to examine the readiness of mills to be candidates for revitalization. The checklist, which was developed by the CED, was sent home with the attendees for feedback and suggestions. The
goal is to have suggestions and feedback returned by July 1st in order to make the necessary changes so that communities that would benefit from using this pre-screening resource may begin to use it as soon as possible.

Information from the symposium, particularly from the session speakers and panelists, was made available on the University of Massachusetts, Amherst, CED’s ScholarWorks page. Slideshows and supplemental material from the day’s event was shared with the consent of the content creator. This information was also disseminated through a ListServ created to reach out to the several stakeholder groups involved in mill revitalization, such as mill owners, developers, town planners, and building inspectors, some of whom attended the symposium. The easily accessible ListServ will be used to continue the conversations generated at the symposium. It will also offer itself as a networking opportunity for interested parties, which could potentially include a message board interface.

There were limitations in the methodology, which included time constraints both during the sessions and for the note takers at the roundtables. Due to the complexity of the conversations and the likelihood of some comments not being taken down, parts of the discussion may have been missed. Additionally, there was a coding bias from the researchers during NVivo® analysis. By identifying themes based on previously conducted stakeholder interviews and research, assumptions were made based on what was important to prioritize for both coding and analysis. Also, proper representation of all stakeholders was limited to the sample of 100 key informants attending the conference.

Following the interviews, several themes and topics were identified as important or necessary to consider regarding mill communities. The topics of interest were established based on their frequency of discussion during the interviews, which assisted the researchers in looking for subsequent trends related to those topics. The “Mastering Mills” Symposium sessions further highlighted areas of focus based on the conversations held during each session and at the roundtable discussions, as well. The coding of nodes (important topics or themes) in NVivo® was based on this information in addition to the number of times each topic was discussed or brought up in conversation -- the more common a topic, the higher likelihood it had of becoming a node. If the topics were broad, they were used as indicators of a theme; related, but more specific topics were used to support the major theme.

11 ANALYSIS

An analysis of how attendees responded to the roundtable discussion question “What will it take to stimulate and/or change mill revitalization in New England?” was conducted to gain a better understanding of mill revitalization in Massachusetts. The responses were recorded by volunteers and coded in NVivo®. To code text data, NVivo® uses a hierarchical system in which themes of the discussion are coded as “nodes” that can then be broken down from parent node (top of hierarchy) to child node. This hierarchical system allows the user to code generally at first and then to get increasingly more specific
after broad themes are established. The team used this system to categorize broad conversations and then coded sub-themes that were embedded within the broader topic. This helped pinpoint challenges, opportunities, and suggestions made by participants.

The analysis is based on the frequency in which themes were discussed by participants. The most frequently mentioned topics or suggestions that were stated at the ten different tables have been identified as priority topics that professionals, academics, and community members feel are in need of more discussion. Topics mentioned less frequently are still mentioned in the analysis, but do not hold the same importance in the recommendations. The analysis will be the basis for future policy and legislation recommendations regarding mill revitalization in rural communities in Massachusetts. To gain information that would be useful for policy change, the team created two broad themes of Obstacles and Suggestions for Improvement.
Figure 1: Frequency of Themes Related to Obstacles in Mill Revitalization

- Marketing & Advertising
- Definition of Historical
- Length of Process
- Zoning
- Communication
- Lack of Staff
- Building Infrastructure
- Lack of Expertise
- Environmental Issues
- Building Codes
- Funding

Number of coding references
Obstacles in Mill Revitalization:

Figure 1 shows the frequency in which each obstacle is discussed. The broad theme of Obstacles is categorized by the following sub-themes.

Key Obstacle Definitions:

Building Codes: Issues surrounding codes that are outdated, harsh, not well targeted towards mills exclusively, and inconsistent.

Infrastructure: The physical structure of the mills being difficult to accommodate as well as the infrastructure that leads into the mills (i.e., water pipes).

Environmental Issues: Brownfield remediation, asbestos, air pollution.

Funding: Money from the state including tax credits, loans, grants; and money from private developers.

Lack of Expertise: A general lack of skills and knowledge to address issues regarding revitalization, repairs, and other mill-related issues.

Zoning: The designation of zones on the mills inhibiting economic success.

Communication: Problems between developers, communities, owners, etc.

Marketing & Advertising: Getting the word out to local people that these mills exist is an obstacle.

Definition of Historic Mill: There is no standard definition of what distinguishes a historic mill from a historic building.

This frequency chart shows that the most significant obstacle rural communities are facing in the Commonwealth is Funding. Funding refers to a lack of money from grants, tax credits, and loans. Additionally, Funding refers to the difficulty in obtaining tax credits due to the limited staff of rural communities. Direct quotes from the roundtable discussion that were coded under Funding were:

“Creation of a Gateway region. Provide money to support and help smaller, more rural communities”

“Mills aren’t in Gateway cities. Establishing “gateway regions”—industrial heritage, economic development needs, lower income, etc., Could also make “gateway only” programs available to more rural areas.”

“Distribution and accumulation of various tax credits (Historic, New Market, etc.) take too long.”
“One complaint I get is abatement issues and back taxes. The current tax structure makes it difficult to buy and sell mill buildings.”

Many of the comments regarding Funding as an Obstacle related to rural communities feeling neglected by the state due to their limited size and staffing, such as:

“Small rural towns need for attention; every town has its niche.”

“[We] need to find a way to help smaller towns know where to go. [We] can’t always rely on regional planning agencies because they are overwhelmed. There is a lot of focus on larger communities.”

“…wants the state to stop treating rural communities like red-headed step children.”

Other frequently discussed obstacles included Building Codes and Environmental Issues. These issues included building codes that are not being interpreted and enforced consistently, not being specific towards mills (also other historical buildings), outdated, and difficult to work around for mill owners. Quotes that were associated with this theme included:

“The existing building code has to be readable and understandable [and] usable by architects and engineers and laypeople, without compromising safety. It would be helpful, since most mill buildings are constructed in a similar manner, if somebody put together a list of common structural issues and repairs.”

“Chapter 40R (rural communities without water). Incentives would be helpful for mill redevelopment but these communities without public water can’t use them. Would like a separate program for rural communities.”

“Building inspection. You always need to keep your eye on contractors, but also building inspectors that contractors don’t want to do business with. Power-hungry building inspectors shutting down projects on technicalities. Union crews saying we can’t do anything now. State can circumvent as new legislation to combat this.”
A few quotes from the speakers at the event in regards to these specific issues are presented below.

Speaker 1: “Rehabilitation Code, because of the building code in some of these old buildings.
Speaker 2: “Mass does not have a rehabilitation code, but other states do.”

Speaker 1: “There’s a conflict behind the fire codes and the fire code.”
Speaker 2: “The problem you have is interpretation.”

Speaker 1: “I find that operating sprinkler systems are different town to town.”
Speaker 2: “Consistency of code.”

Speaker 1: “Yeah because it can differ town to town.”
Speaker 3: “Yeah and one Building Marshall will move and bring his code with him.”

Environmental Issues was the third most frequently discussed topic. Obstacles related to Environmental Issues included the cleanup of brownfields, asbestos, lead, PCBs, and demolition constraints. Many of these Environmental Issues were cross-referenced with a lack of funding and an inability to acquire the money needed to remediate a site. This indicates that the problems are interrelated and thus recommendations will need to be multi-faceted and all-encompassing. Quotes regarding Environmental Issues included:

“MA has good lead paint credit program that helps landlords, but we could have one for asbestos.”

“Hazardous materials is a big thing; how do you deal with cost of removing? At the age of these buildings, they will have at least one including asbestos, lead, or PCBs.”

(Referencing a building that burned down) “Cleanup [is] a lot cheaper to do before you lose buildings, which is [an] inevitable threat when buildings are sitting around for a long time.”

“Brownfield mitigation, always comes down to money. Streamline [the] process through EPA, DEP, etc. Time is money. Developers only have a certain amount of time to secure financing; if [you are] tripping over administrative hurdles on state level, it ruins [the] project. Environmental policy and incentives need to be more cohesive.”
As the most frequently reported obstacles, Funding, Building Codes, and Environmental Issues are considered to be most significant and in need of immediate attention when addressing mill revitalization in Massachusetts. Although the other identified Obstacles displayed in Figure 1 are not discussed further in this analysis, they hold significance when understanding the full scope of obstacles that stakeholders face.

**Suggestions for Improvements**

The purpose of the roundtable discussion during the “Mastering Mills” Symposium was to have attendees offer their suggestions for improvements for mill revitalization in Massachusetts. Figure 2 shows the most frequently discussed topics were Educational Information, Administration, and Funding. The following analysis will focus on the three most frequently mentioned Suggestions for Improvements to convey the priorities for the majority of attendees.
Figure 2: Frequency Themes Related to Suggestions for Improvements in Mills Revitalization
An increase in Educational Information was the most frequently discussed Suggestion for Improvement made by attendees. Since Educational Information is a broad topic, the team identified additional sub-themes within the Educational Information theme, including Skill and Job Training, Resources, and Issue-Specific knowledge.

Suggestions for Improvements made in Skill and Job Training were:

- Providing opportunities for job training in rural areas.
- Establishing a committee of experts in funding, building design, environmental remediation, etc, who can be contacted for assistance in mill revitalization.
- Providing training to local and regional planning staff who can act as a resource to rural communities.

Suggestions for Improvements in Resources included creating:

- A new definition for Historic Mills.
- An inventory of mills in the state that are similar to ones created in Connecticut and North Carolina.
- A realistic development strategy for mill revitalization to decrease failure rate of projects.
- A guidebook/road map with best practices.
- Generally accepted standards that are published by the state to establish consistency.
- One easily accessible website or manual that provides all applicable information on mill revitalization. This resource should provide material for the multiple stakeholders who are generally involved in revitalization projects, including information regarding state laws, building codes, funding sources and options, abatement, experts to contact, environmental cleanup, etc.
- Targeted grants and subsidies for rural, historic mills.
- A space to advertise and promote revitalized mill buildings.
- A space for stakeholders to communicate and network.

Suggestions for Improvements in Issues Specific Knowledge were:

- Increasing educational material on
  - Credit and funding for environmental issues (PCBs, asbestos, lead)
  - Back taxes and how the process with the state is conducted
  - Public-private partnerships as a means of funding
The second most frequently discussed theme was Administration. The category of Administration represents suggestions that were directed at committees, state departments, and officials regarding changes to make mill revitalization more attainable. Suggestions for Improvements in Administration included establishment of:

- A Gateways region that proved funding and support to industrial heritage communities.
- Assistance from regional planning agencies.
- Mill tax credits.
- Internal support so mills can thrive.
- Committees of experts in mill revitalization.

Funding was the third most discussed topic for Suggestions for Improvements. The category of Funding included comments about types of funding and improvements that can be made in the funding structure. Suggestions for Improvements in Funding were:

- Increasing involvement of Mass Historical Commission in projects.
- Promoting 21E funding for environmental and infrastructure work. State should take a role in identifying current conditions to help position mills to be bought. This should act as an incentive.
- Increasing funding options for rural towns.
- Refining application process for grants, loans, tax credits, etc., for rural communities.
- Improving State Historic Tax Credit: Currently there is no consistency in interpretation between state and federal programs, and the process is lengthy.
- Creating a financial package.
- Creating an adaptive reuse program to incentivize developers to come to rural communities, as well as providing funding mechanisms and partnerships.

The most frequently discussed topics were highlighted from Obstacles and Suggestions for Improvements for this analysis as well. Although topics reported less frequently were not discussed, they should be noted as other areas to examine for further research.

12 RECOMMENDATIONS

These recommendations are intended to provide the state officials who oversee mill revitalization with current and meaningful data on what stakeholders working in this field are experiencing and the changes believed to help mill redevelopment thrive in Massachusetts. The recommendations are based on the most frequently discussed topics collected during round table discussion at the “Mastering Mills”
Symposium. Due to the variance in how these topics were discussed, their order was not decided upon in any particular frequency pattern, as to not propose the team’s own hypotheses on the original material. We provide two sets of recommendations, one for Obstacles identified during the round table discussion session and another for specific suggestions made by the attendees to improve the systems in place. There will be an overlap in data presentation due to the fact that the responses were collected in two different contexts: present and future. Obstacles are current problems that stakeholders and mill communities face in regards to mill revitalization. Suggestions for Improvement are ideas provided for remediating not only the specific obstacles discussed, but other mill revitalization issues, for the future. We believe that there are ideas worthy for future implementation in both recommendation sets, since many of the Suggestions for Improvement further drive the identified Obstacles, especially if they are not remedied.

**Recommendations for Suggestions for Obstacles:**

The three most frequently discussed topics regarding obstacles that attendees face during the process of mill revitalization were: Funding, Building Codes, and Environmental Issues. The obstacles that attendees discussed when referring to Funding included issues with lack of access to funding opportunities due to their population size, lack of knowledge regarding how to apply, lack of staffing to apply, and the available funds are being “diluted” with others that qualify for historic preservation funding.

Our recommendations regarding funding are:

- Designate a portion of the available funds (tax credits, grants, loans) to rural communities, which will then compete for funding on an evenly distributed scale.
- Create an application that is feasible for a rural community to complete.
- Designate funds from the Historic Tax Credit to mill revitalization.

Building Codes were the second most frequently referenced obstacle during the round table discussions. Obstacles regarding building codes included inconsistency of the codes, outdated and harsh regulations that make redevelopment tedious and difficult to overcome, and codes that are not applicable to mill buildings but are still prohibiting the process of mill revitalization. Recommendations regarding Building Codes are:

- Review of the building codes and standards that are used for mill buildings.
- Create a State Standards Guidebook for building inspectors to create consistency of codes across the Commonwealth.
Environmental Issues was the third most frequently discussed obstacle. Attendees discussed having difficulty acquiring funding for brownfield remediation. Because this obstacle is interrelated with Funding, those recommendations also apply. Our recommendations for Environmental Issues is:

- Designate a portion of available funding to brownfield remediation and site clean up in rural communities.

**Recommendations for Suggestions for Improvements:**

During the roundtable discussion, attendees made recommendations for improvements that were then analyzed and categorized. The recommendations in this section are derived from what the attendees said and are simply organized and condensed into 10 of the most frequently stated Suggestions for Improvements by attendees. The team recommends that this list be used for any future legislative or policy change made regarding mill revitalization.

The Top 10 most frequent Suggestions for Improvements made by attendees during the round table discussion are:

- Create a new definition of Historic Mills that better identifies mills in Massachusetts.
- Modify the Historic Tax Credit to make mills a separate category and not just another historic building.
- Create and designate funding specifically for rural communities that have mills.
- Create a website or community space for stakeholder collaboration.
- Eliminate recreation of the wheel by providing a resource that contains all of the information needed to revitalize a mill.
- Create a Guidebook/Roadmap for anyone who is revitalizing a mill.
- Create a Historical Mill Committee that can be contacted and utilized as an expert resource.
- Inventory all the mills in Massachusetts.
- Create a Guidebook of generally accepted state standards for building codes and repairs.
- Pursue further analysis on funding structure, including types of funding available and speed of return on credits and grants.

It should be noted that the applicability of these recommendations are dependent on the size of the town, its legislative structure, and the area's community values. To identify the context in which the recommendations are to be applied will help make for more successful and efficient application. There is no “one size fits all” solution. What impacts one community may not impact another in the same way.

These recommendations are based on the findings from the interviews that were completed in the
first half of this project and from the Mill Symposium. The purpose of this project was to gain information from stakeholders in an effort to influence state policy that will positively support mill revitalization in Massachusetts. Beyond being a force for policy change, the results of this project can also be used to further the discourse surrounding the state of mills and their potential to thrive in the Commonwealth.

12.1 NEXT STEPS

The next steps are to share this paper with the mill stakeholders who have been identified throughout this process. This document will also be shared with legislators, specifically those who already have shown support for mill reuse projects, with the hope of obtaining future endorsement, policy implementation, and funding. The next section contains an annotated reference list that outlines resources for mill stakeholders to utilize in their efforts for revitalization.

13 REFERENCE LIST


These rules were helpful in understanding the barriers that some mill owners face when it comes to redesigning their mills according to specific architectural guidelines.


This is a summary of the Ludlow Mill, and provides information on funding from the EPA Brownfields program given to WESTMASS Development to revitalize and develop the mill.


This thesis describes the positive impact of adaptive reuse, which is the restoration of historical industrial buildings into residential living areas or other commercial purposes. Further, it provides many case studies on different elements of this process, including tax credits, building codes, and costs.

A short summary of the Downtown Master Plan in Greenfield. It provides information on steps the city has taken to revitalize the area and includes information on tax credits, energy efficiency, green revitalization, and partnerships.


This article is about the restoration of the Loray Mills in Gastonia run by developer Bill Hughes, who has been hired as the developer for a mill property in Athol. It contains information and a video about the project, serving as inspiration to others who may want to develop their mill properties.


A report on the Downtown Turners Falls in Montague, MA. It gives the current status of the mill itself and provides different plans and operations to maintain and expand the mill in the future. It is useful because it includes plans and intended projects.

Franklin Regional Council of Governments. (n.d.). *Franklin Regional Brownfields Program*

A pamphlet on the Franklin Regional Brownfields Program, which contains an overview of the project as well as contact information for the Franklin Regional Brownfields Program. It also states goals and steps needed to be taken as well as information on funding and EPA loans.


This four-page document describes the process of redeveloping former mills by using grants from EPA in order to remediate brownfield toxins. This is an excellent read for those who want to understand how EPA grants may be useful to use towards cleaning up brownfield mill sites.


Information on Gateway Cities and where they are located in Massachusetts. Lists initiatives and programs for those cities including the Housing Development Incentive Programs and other resources for Gateway Cities.

This book examines Charlotte, North Carolina from its past as a textile manufacturing center and in recent years, its transformation into a corporate leading city of the South. This is beneficial to understand ways in which mills were important to the city and have been revitalized successfully.


Provides examples of four case studies that show successful redevelopment of mills throughout Massachusetts. Provides background and history on mills as well as case-study-based green principles for mill revitalization.


A comprehensive set of regulations for existing buildings that includes codes specifically for development. A resource made to encourage the reuse of existing buildings in a way that is effective for the town financially while following proper safety precautions. It includes in-depth methods for historical buildings.


This provides information and insight into some of the larger aspects of mill revitalization that are important to their success. Focusing on mills in Massachusetts, it stresses the importance of mills and what they can do for a community.


An overview of plans made to revitalize parts of Fitchburg. Included are challenges, goals and plans for the redevelopment, along with information on EPA brownfield funding and how much they received.

This article discusses many mill properties from across the U.S. that have been successfully converted to housing such as condominiums and apartments, with a mixture of funding and building strategies described.


Identifies four main steps to redevelopment of brownfields. Gives an explanation of the process needed to clean and develop contaminated areas. Also, it provides information on both national resources and Massachusetts resources along with brownfield-specific contact information.


A summary from the Massachusetts Brownfield Act that provides methods, incentives and programs to help overcome any obstacles or hurdles involved with development. It contains contacts and resources to aid developers who are facing cleanup of brownfield contaminants on a site.


This webpage has more information and resources for Gateway cities through a program called The Gateway Cities Innovation Institute run by MassINC. It provides multiple research reports and articles on these cities and initiatives.


This article from the Urban Land Magazine provides an extensive inventory of one mill property in Minneapolis that was transformed into housing while using tax credits to support funding.

This paper provides lessons and insight on the recent history of mill revitalization. It shows the importance of mills in our modern day and the impact they had and still should have in our communities. This article describes the successes and failures one may go through in the process of revitalization but maintains their importance through these tribulations.


This Master Plan provides information on proposed strategies for revitalizing areas including a mill. The plan includes financial and economic information necessary for the revitalization.


This webpage outlines the use of smart growth building practices that can be utilized for mill properties, including the creation of Mill Revitalization Districts and characteristics that support these districts.


This is a case study on the Whitin Mill in Northbridge, MA. It outlines the development project and funding, and serves as an example for smart growth/energy building.


Lists programs and grants available for brownfield redevelopment through the US EPA. Also provides resources and information on other sustainability programs throughout New England.


This page contains definitions for rural and urban communities, which were used to frame the discussion about resource allocation to certain communities throughout the state.
This document states the Brownfield Economic Development Initiative. This is a competitive grant program used to spark interest in the redevelopment of brownfields and includes information on eligibility as well as the contact information for the BEDI.


This report provides case studies on different mill projects throughout the country. Data are included on different mill projects funded by the EPA as well as financial and redevelopment strategies, and provides federal, state and general resources.

14 APPENDICES

14.1 FACT SHEET TAKEAWAYS, DECEMBER 2015

Rivers, Dams and Floodplains
- Interview 1- Pittsfield, Mills being located near rivers often have roads/railroads close to river, making access to mill difficult. Need to have roads for two-way traffic.
- Interview 2- Montachusett Regional Planning Commission, river sites and floodplains can be a challenge if there is existing pollution on a site, because the pollutants can be washed in the river; this makes owners liable for pollution lawsuits.
- Interview 3- Mill owner of several mills in Bennington, VT, says that removal of dams or restarting hydropower can initiate polluted silt from bottoms of mill ponds/rivers, triggering environmental contamination and review.
- Interview 4- Great Barrington, Erosion can make land be lost into rivers which makes ground unstable for mills and also wash pollutants into river if site is contaminated. Endangered Species Habitats can be found along rivers/floodplains, which can call for long months of review when considering redevelopment. Cited an example from Housatonic when mill owners came together to write CDBG to stop flooding in their basements (located next to river on floodplain).
- Interview 5- Northampton, also echoed extra scrutiny from conservation commission.
- Some mill owners consider building river walks as a way to encourage public use by mill. Land and Water Conservation funding was used in Ludlow mills but requires a recreation plan to be submitted.
Economic Market and Historical Credits

- Populations are declining, makes for less demand for housing and mill conversions into residential.
- Interview 6-Easthampton has seen a growth and complete success of reuse of their mills - attributed to 40R smart zoning and tax credits with affordable housing. Also used the Community Preservation Act fund.
- Interview 1- Pittsfield, Rice Silk Mill contains affordable housing that used low-income tax credits and 40R zoning.
- Interview 7- MA Historical Commission, seen tax credits and given Preservation Awards to many cities across MA for mill conversions. To do mixed use, you need to have people downtown, or else you don’t have a market to use the space. Less people and less access to jobs and amenities in Western MA, therefore market is different than Eastern MA.
- Interview 8- Haverhill, Historic Tax Credits used for The Cordovan and Hamel Mills
- Interview 5- Northampton, Zoning code provides more flexibility for historic buildings than other cities.
- Interview 9- Lowell, Has building conversion ordinance which allows historic buildings to have housing regardless of zoning. Discussed regional differences between Eastern MA and Western MA, echoed what Interview 7 stated about economic market driving the mill reuse.
- Interview 10- Greenfield, Greenfield Renaissance Tax Case Study, tax credits to get all buildings up to code and mills were being redeveloped under one project coordinator. Interview 10 described carving out specific parcels on mill sites and calling them “separate projects” for the sake of increasing grants to fund projects
- Interview 11- Orange Innovation Center, incentives to leaseholders: fiberoptic hub (one of 23 throughout MA), offers discounted gym memberships for leaseholders and low cost wifi. There were problems with historical status of bldg when they wanted to:
  - keep the steel-frame windows to get historical tax credits
  - however, bldg is so old and went under so many renovations with no access to the plan histories
  - info needed for credits wasn’t accessible; decided it wouldn’t be worth it
  - steel frame replica windows cost double the price (500,000) rather than new energy-efficient windows
- Interview 12, Ware- Town meeting recently approved special tax assessment to revitalize manufacturing bldg in the mill yard- looking at 5-6 year process to get bldg and ground cleaned up
- Interview 13, Framingham- Discussed the need for the mills to be redeveloped considering the current trends in market and who is living where, but also thinking future-forward. Further, she discussed different types of tax increments (TIFs and DIFs) to support funding.
Ownership and Appraisals

- Summary of Interview 14, Interview 10, and Interview 15, Single owners- who is developing it matters. Success is determined by how long owners are willing to be invested and also willing to put in effort and money to cover upfront costs.

- Multiple owners- They can work together to make larger projects more successful (Housatonic, CDBG funds- Interview 4) (Greenfield Renaissance Tax Case Study, tax credits to get all buildings up to code and mills were being redeveloped under one project coordinator- Interview 10). Interview 10 described carving out specific parcels on mill sites and calling them “separate projects” for the sake of increasing grants to fund projects.

- Interview 8- Merrimack Regional Planners, Lawrence to Salisbury, not Lowell. Most mills have been owned by towns at some point, sometimes due to tax titles (the town takes over before it becomes totally helpless or sells it to someone for cheap). Mentioned Peabody and Haverhill mills were sold to people that actually wanted to develop.

- Interview 10- FRCOG, mentioned tax titles and fear of public hazards to town residents. Interview 2 (Montachusett Regional Planning Commission) echoed this point and also described that if the town owns the mill, they are responsible if people enter it and become injured. Towns have to take appropriate measures to board up the mills.

- Interview 2- MRPC, Fitchburg used private/public partnerships to rehabilitate industrial mills during the 1990s. A combination of investors/developers, federal grants and Fitchburg University raised funds to reoccupy factories that today are office/manufacturing spaces.

- Interview 8, Interview 3, Interview 15 all said that unforeseen issues are worse than upfront issues (unforeseen expenses).

- Interview 6- Easthampton, cited that there are many single owners of mills, a lot of them are developers. Developer had the capital to be able to afford the redevelopments. In her opinion, there’s a thin line between capital improvements and leasehold improvements. She puts together a plan based on how many tenants at what cost per month for how long to justify spending 300,000, and then will decide to pursue and get letters of intent.
  
  - She also mentioned the culture clash of public v private partnerships; different approaches of how to move forward but ultimately it is necessary to collaborate. This was done by a Massworks project and involved the three parties: City of Easthampton, utility company, and 3 mill owners. The utility company had to bury all old lines and put in new ones underground since the dangerous transformers were also old and thus were forced to upgrade buildings to match the new electrical lines. The three mill owners came together in order to convince the remaining 2 owners to join in on the collaborative efforts. The utility company gave estimates for the cost. When Easthampton got the grant the cost went through the roof with the utility company, and the mill owners had to work with company and were even willing to put in money in order to make the project
move along. She also mentioned the public procurement process of mill owners (they couldn’t just spend money, had to be used responsibly).

- Interview 16 of Sunderland echoed the need for early partnerships between private and public funders and grabbing grants as soon as they become available because repairs are costly.
- Interview 12, Ware- Mill yard was developed by one entity at some point; however it was subdivided into multiple parcels with different owners. The utilities were only installed for one entity because there was no thought of future subdivision, thus this leaves ownership mistaken for who should take authority and make decisions. There was also no mill owner organization where they could come together and make informed decisions. Also was offered an idea of creating agreements between the property owners to get their utilities written together in order to apply for one Massworks grant for infrastructure installation.
- 30% rule from 521CMR - Cost of alterations is more than 30% of the value of the building over the course of 3 years, entire building must be brought up to code.
- Interview 17, Palmer. The town and mill owners of their one undeveloped mill have different ideas on what to do with the place and it has lead to nothing being done.

Pollution and Brownfields

- Interview 15- Natick and Lowell, Town-owned properties are eligible for state remediation grants and assessment grants versus privately owned mills (only eligible for assessment grants).
- Interview 2 and Interview 8 both agreed that environmental remediation clean-up efforts are the greatest impediment for mill revitalization due to time and money.
- Interview 2 and Interview 10 agreed that in some cases it is better to tear down the building. Interview 2 said that if there is ground pollution, sometimes can cap it with soil or asphalt for parking lot, which is considered a form of remediation. Interview 1 described that assessment determines if cleanup is necessary.
- Interview 2 and Interview 10 discussed revolving loan funds used by regional planning agencies/cities to offer economically viable loans to assess and sometimes clean sites. EPA has a program that gives grant money to start a revolving loan fund.
- Interview 10 described types of assessments necessary for brownfield and environmental remediation: Phase I (history of site including interior of mills for lead and asbestos along with outside for groundwater and soil), Phase II determines how much contamination there is and Phase III decides clean up plans. Greenfield has a Greenfield Brownfields Program- hires experts to test the brownfields and can be used for public and/or private mills but the mill owner cannot be responsible for the contamination. These grants are very competitive- could use up to $50-60,000 for one site for private development. Owners and consultants cannot take more than $200,000 cap per property.
○ Challenges of the revolving loan program: Have to use the prevailing wage for contractors working on public projects, which can make the wage costs higher, thus the money doesn’t go as far (to get more workers at cheaper costs).
- Interview 13 of Framingham also discusses that Framingham has a brownfields program similar to Greenfield
- Interview 17 explained that pollution grants focus on brownfields, not the environment of the building itself. So you can’t get help removing lead/asbestos.

Public Health Codes and Title V
- Interview 10 - FRCOG, advised that one of the Strathmore mills (Turners Falls) was bought by a developer and used it to store garbage and paper, making it a fire hazard for the public. The town decided to take it from the developer.
- Public Safety and liability from injuries on abandoned or boarded mill sites

Roads, Parking and Railroad Sidings
- Minimum parking requirements can be problematic on mill sites since many do not have large amounts of vacant land surrounding the site. Usually triggers need for exemptions.
- Interview 1 - Pittsfield, Mills being located near rivers often have roads/railroads close to river, making access to mill difficult. Need to have roads for two-way traffic.
- Interview 11 - Orange Innovation Center, discussed deciding easements for parking on the land where the Center is located.
- Interview 6 - Easthampton, Eliminated off-street parking requirements at mills to incentivize mill purchases but this has become an issue since tenants are filling up the mills and now there is not enough parking. They are using three Massworks grants to make a partnership with mill owners for 400 new parking spaces to encourage more visitors to the mills.
- Interview 4 - Great Barrington also got rid of their minimum parking requirements in their downtown since there was no space and mixed-use buildings would require less parking.
- Interview 14 - Greenfield Director of Planning, Greenfield allows exemptions from the minimum parking requirements.
- Interview 2 discussed using a parking lot as a way to cover up a polluted site
- Access to mill sites by limited entrances and/or no bridges when by rivers makes it difficult to reuse (for construction and also when revitalized, where and how will people enter and exit?)
- Interview 13 of Framingham discussed that next to their mill is a river but is only accessible by foot. There is no way to encourage even people getting to the river since it is covered with brush and is uncleared.
Structural Codes and Infrastructure

Building Codes

- Interview 8- MRPC, Individual building inspectors can sometimes try enforcing codes before they have been changed, which confuses building owners about how they should bring their building up to code.
- Interview 18 and Interview 5 mentioned The 30% rule: When making alterations work, if the cost of the alterations is more than 30% of the value of the building (not including land value) over the course of 3 years, the whole place has to be up to code, according to 521 CMR Chapter 3 sections 3 + 5 (3 is jurisdiction, 5 is definitions).
  - This rule makes working on low-value sites almost impossible to bring up to code since fewer improvements will trigger the requirements more quickly.
  - Interview 4 said that in Housatonic Village, some mill owners could not make changes because they could not afford the costs of getting the entire building up to new codes.
  - The 3 year lookback on the 30% rule creates lots of slow, iterative projects.
- BOCA 2009 Codes Chapter 16 - Seismic Requirements - Any additional weight to a building requires additional reinforcement.
- Interview 5 of Northampton said changing a building’s use, especially to residential, will trigger safety parts of the code (usually sprinklers).
- Interview 12, Ware- Brownfield site assessment and remediation requires a balancing act between inspectors (need to be more flexible with time) while still following the laws, especially for elevators and sprinklers. There were situations in Ware and Easthampton where the inspectors worked with the firefighters to “get up to code.”
- Interview 6 of Easthampton- also mentioned the culture clash of public v private partnerships; different approaches of how to move forward but ultimately it is necessary to collaborate. This was done by a Massworks project and involved the three parties: City of Easthampton, utility company, and 3 mill owners. The utility company had to bury all old lines and put in new ones underground since the dangerous transformers were also old and thus were forced to upgrade buildings to match the new electrical lines. The three mill owners came together in order to convince the remaining 2 owners to join in on the collaborative efforts. The utility company gave estimates for the cost. When Easthampton got the grant the cost went through the roof with the utility company, and the mill owners had to work with company and were even willing to put in money in order to make the project move along. She also mentioned the public procurement process of mill owners (they couldn’t just spend money, had to be used responsibly).
- Interview 11- Orange Innovation Center, The business side of the building is almost fully occupied but the other portion which is more warehouse needs a lot of capital improvement (roof, windows, HVAC). It is hard to occupy so the OIC is using letters of intents in order to get return of investments on that section of the building and plan to develop it as a maker space (metal/wood/glass work).
Different uses have different standards, so if plans for use are changed, a renovation might not go far enough Interview 19

Architectural Access Codes

- Sprinklers/elevators are the largest single items, as well as accompanying upgrades to the building or infrastructure to make new sprinklers/elevators work. (Interview 14)
- All the codes need to mesh better since many different types of codes (not just building codes) can cause conflicting requirements and redundancies of inspections. This can often be slow and confusing to find that various codes require similar expectations but may have minor differences. (Interview 14)
- The Architectural Access Board (AAB) is a significant part of the building code process. This is a state board that meets twice a month, mostly making decisions about variances. Each state can decide how to use the International Building code and adopt further architectural access codes, usually implemented by a state body.
- When changing from private to public use, a building must become accessible through the Building codes and ADA compliance.
- The state and federal accessibility laws are different, but neither is less stringent than the other. MA policies are in response to ADA requirements
- Interview 5 says “if you’re doing any building work, you can try to get a variance from the architectural board” if there is a part of your building that may not be up to code by the time you are having it inspected, thus giving the mill owner extra time.
- Variances are granted when there is some accessibility already, and usually protects historic parts of buildings or buys more time for owners to make changes. It can also be granted for reasons of impracticality (mostly prohibitive costs).
- Mill owners also stated that “Fire safety is the most expensive requirement: sprinklers, firewalls between tenants, and need multiple egresses from each tenant’s area.”
- Interview 11- Orange Innovation Center, Their building has been design and architectural guidelines compliant for the last 8 years, which all of the changes were made by the previous owner. All of the upgrades include: sprinklers, handicap elevator that runs on vegetable oil, freight elevator has been since the 60s, handicap accessible bathrooms on all floors, fire safety. Everything except the industrial side is handicap accessible.
- Interview 11-The Orange Innovation Center contains an on-hand lead testing kit, and alerted that most of the spaces were repainted and asbestos concealed. For the brewery, they had to remove walls and needed asbestos specialist at $1300 per window, only to remove it (not to paint or install a new one).

Elevator Codes

- Greenfield Renaissance Tax Case Study- Interview 10 of FRCOG
  - Downtown Greenfield up on the hill had a lot of vacant buildings- needed elevators and had to get up to code. The Tax Case Study was a novel approach because it got numerous mill owners to come together to apply for grants to make
all of the floors accessible (money went to elevators, stairwells, and sprinkler systems).

**Infrastructure**

- No infrastructure issues other than broadband/fiber installation costs, the connection from a main road into a site or down an access road can be thousands (Interview 14)
- Interview 12- Ware, Mill yard was developed by 1 entity at some point however it was subdivided into multiple parcels with different owners. The utilities were only installed for one entity because there was no thought of future subdivision, thus this leaves ownership mistaken for who should take authority and make decisions. There was also no mill owner organization where they could come together and make informed decisions. Interview 12 offered an idea of creating agreements between the property owners to get their utilities written together in order to apply for one Massworks grant for infrastructure installation. A lack of resources makes it a huge problem and sometimes may require the town to take leadership.
- Interview 13- Framingham, Existing building structure serves purpose for redevelopment that satisfies a certain aesthetic appeal some tenants look for. Also makes it cheaper to renovate since many tenants like the ‘exposed’ look of their utilities

**Zoning Uses, Permits and Redevelopment**

- Interview 8- MRPC, 40R Smart Growth Zoning: Smart Growth Overlay District Act. 40R district incentives and historic tax credits helped fund the revitalization of the Haverhill mills and mentioned that if the permitting process becomes too slow then many developers will move on. 40R districts allow for denser housing, faster permitting, and housing by right instead of special permit. It has been a successful strategy in Haverhill.
- 43D Local Expedited Permitting: This is a state run program that makes local expedited permits which involves less bureaucracy and speeds up the permitting process. Guarantees local permitting decisions on priority development sites within 180 days. (MassGov Housing and Economic Development).
- Interview 2 (MRPC) says that for revitalization to work it needs appropriate zoning. Mixed use is typically what should be used, which Fitchburg used and therefore increased density closer to commuter rail lines. Interview 7 also echoed the point that mixed-use development and transit-oriented development makes a strong case for reuse of mills.
- Interview 14- Greenfield, described that some places need new master plans, infill ordinances, adaptive reuse ordinances, and/or overlay districts to help with redevelopment.
- Interview 4 of Great Barrington said the adoption of a zoning overlay district in and around the mill sites helped them. These mills were previously zoned for industrial, and did not allow for zero setback construction. These mills also were violating the existing zoning, so they adopted a overlay district to give mixed-use zoning by right on the site.
- Interview 5 of Northampton Building Department described the special industrial district where industrial and non-industrial mills are in use and there are a combination of publicly accessible businesses and non-public businesses.
- Interview 12- Ware, Ware changed the zoning district from industrial into mixed use for the mill yard, which makes options for future development more flexible. A lot of upper stories are used for storage and in mill areas this is an underutilized use, but companies need warehousing still so it cannot go away. Ware is not in the position to move into making the upper floors residential.
  - Interview 12- Ware, Zoning is the key for success! In Easthampton, zoning was changed into anything goes which worked well, and a special permit process was used to approve one mill at a time, not use at a time. This makes it so that an owner can include more uses in and use up one mill. Furthermore, the mill yard was important in mill industrial base so there was a strong desire from the town that industrial uses could remain. This is why they’re seeing manufacturing stay in the town. A lot of uses are being included including: light manufacturing, commercial, and residential. Heavy industrial is not permitted, light industrial is but by special permit (planners have to mitigate any potential uses for future).
- Interview 6- Easthampton, discussed the conversion to different uses that include small manufacturing and light-industrial uses.
- Interview 17- Palmer is drafting a mill reuse ordinance, hoping to make it easier to add residential, commercial, mixed use by right.
- Interview 13- Framingham,- Zoning can be used to reshape what planners want to see in a town and make sure that it follows what residents want for certain uses. Zoning however can be hard to change overtime and also should consider that zoning uses can change as people’s wants change overtime.
14.2 MASTERING MILLS SYMPOSIUM SPEAKER TAKEAWAYS

April 12, 2016
Meredith Savage – note taker
Mastering Mills - Conference Notes

John Mullin – Opening statement
· We have Gateway Cities, but we don’t have Gateway Towns – need an adjustment for this, need funding.
· Importance of the mill town checklist- a way for the town to prepare for development of the mill.

Jessica Allan – Lessons in Mill Revitalization for the Town
Interview 12 Beckley- town planner, Ware.
JA- Town Planner, East Hampton, TP-Tim Purinton-MADeptF&G
Pleasant Street Mills Infrastructure Project
· 2 phases.
· Phase 1- biggest expense was burying the utility lines; done in 12/2014.
· Phase 2- will be done by 2016, June. All new storm water infrastructure; infrastructure for public art; connecting mill to bike way Rail Trail by bike-ped ramps.
· Got some public funding as well as private funding and funding from utilities. They could apply for (and got) MassWorks grants because of linking to the Rail-Trail: 7.2M
· Lessons Learned:
  o TTT- things take time: Urban Rivers Vision, 2002; charrette process, came out with a vision and action plan; Implementation: upgraded lower mill park 2008; created new “front doors” from Mills to Park
  o Zone for what you want, not what you got: they were able to have a Mixed Use/Mill Industrial Zone created; got a one stop permitting process.
  o Leverage CPA funds! It is a way to get local dollars to match state funding; it is for public housing, historic preservation.
  o “Skin in the game:” Do you have to pay to play? Property owners must come to the table (municipal government) to really be invested.
  o Respect the cultures: different mindsets between municipalities (bean counters), mill owners (entrepreneurs), and utilities (multi-level company)
  o Establish clear lines of communications: weekly meeting kept this project together; allowed for direct communication between contractors and mill owners; kept the project public- used Facebook, other electronic media.
  o Plan for the best, prepare for the worst: you have no idea what is underground; have contingency funding, no less than 15%; will likely run into contaminated soils; there is always a solution.
  o It is not what you know… (but who you know?): Make use of your legislators, get them out to the site; work your relationships, cultivate them.
  o Think long term for legal agreements: budget time and money for legal review by multiple parties; get all the parties to the table.
  o Public dollars spurs private investment: big lesson for municipalities; mill has new business—two craft breweries, 10 new recording studios, new professional office spaces, medical marijuana.
TP: his dept. focuses on restoring aquatic ecosystems; he thinks barrier removal is best way to restore ecosystem in river; very few dams good for hydropower development; of 3000 dams, most are privately owned; many towns were left with dams after earlier mill owners left, mills went out of business; dam safety huge liability for dam owners; very expensive to get the dams up to code; “resiliency” – new code word for community planning; in many cases, have found beautiful riffles under dams; don’t see every dam as evil on the landscape; recognize that some dams have worth; TP talked about one case- Cascade Mills: $750,000 to bring dam up to code—F&G worked with mill owner to remove the dam for about ½ price, was able to leverage local $$; history was not fully preserved, but some have been, and what they got in return was return of a beautiful river.

MD- works for town of Webster: small town planner perspective, very little money, she does it all- planning, grant-writing, permitting…. Small mill town, trying to draw people in is always a challenge.

Questions:

Dealing with PCB contaminations- TP answered: F&G works with DEP to streamline the process, but PCBs are their own deal (how to deal with the contamination- federal rules); they try to have the site (dam) removed and to get the owner (if can find) to pay for the clean-up.

Issues with townspeople not supporting project- MD answered: many don’t want to see redevelopment of the mills, they want to see progress- box stores; have a tear-down mentality; not a desire to preserve; in Webster, mill housing is in a state of disrepair- same mentality, tear-down.

Tenants having to move out given price/rent increases: JA- tenants are moving around to various mills depending on increases; she has some worry about gentrification; market is speaking to, catering to who is moving to the Valley (i.e. from NY); she thinks there is going to be a change in manufacturing [direction]- more arts and culture, technology, less “widgets.”; mills have a separation of uses: top floors tend towards residential, middle to offices, bottom to (? Missed it- manufacturing?)

What was local government role in marketing? MD- have no marketing yet in town of Webster. JA- role was trying to get permitting process easy; mill owners in general did great job in their own marketing; city trying to help by creating events to get people to the mills.

Cost of increasing cost of services- the residential uses, what impact on services? JA- singles tend to be on one wing, families on another.

John M- final comments: .30 kids/mill in general- takes three units for one kid; fire trucks often don’t have apparatus to reach third floor, so fire costs are a real issue that must be addressed. Also commented on role of dams- yes some dams should go, but some create beautiful areas, are part of area- we need to find middle ground.

Bill Hughes – Lessons in Mill Revitalization Mill Owners; Interview 17, moderator

Mastering Mills- Historic Revitalization – have developed over 2.5M sqft of mill space

Loray Mill Case Study, Gastonia, N.C.- a $75M project; financed through construction loan and state Mill and Federal historic tax credits; 600,000 sqft.; Video: History- 1902 built, 1993 abandoned mill (Firestone); Gastonia was built on textile business; its history means a lot to Gastonia- about 112 years old now, it is a landmark; town adopted it as a catalyst for economic development; new owner saw it as a destination, a revived city center; was seen as a project that would change west Gastonia- seen as something that would transform their town and Gaston County, a symbol of hope and aspiration. (end video). Any mill project
requires a team effort. Developer=historic preservation partners (Firestone got tax credits). Preservation North Carolina (PNC) (non-profit)- Firestone ultimately donated mill to PNC. City of Gastonia: Loray project has taken almost 20 years; truly must get bank, lender to buy into the “if you develop it, they will come.” City worked closely with developer, helped move them through the process, figured greatly in the developer staying committed to seeing this through. The 6-term mayor was a champion of the project, plus had support from other officials; for every $1 spent of mill (developer), $7 realized by city (figures a result of a study done on this). City subsidized rent until tenants came in; got permanent 50% tax deferral for local designated historic properties; $400K electric fund to underground utilities; rollercoaster of funding/loans- securing/losing/Securing; 2013 closed on financing! Three points on success: 1) know it will be complex development/financing (must make economic sense, must be able to adjust on the fly), 2) must have cooperative seller (rarely closes on schedule), 3) must have motivated municipality, otherwise will not be able to combat/overcome naysayers. Passionate people/ champions, helped block demolition of the site. Results: $15M of new jobs during construction Phase 1; revitalized an abandoned area; tourism increased; overall $550M economic impact (Loray Mill Village).

GB- Greg Balukonis- Town Admin, Dudley, MA- emphasized the importance of the town supporting such projects; town needs to articulate why development will take place, economic benefits.

PD-Philip Duffy- Community and Econ Dev. Dir for town of Clinton- small town; have had a number of successful mill conversions over decades; most recently have been to residential uses (Bigelow and Lancaster mills); stressed importance of community articulating to developer(s) what town/community wants; encourages that developers try to learn about the community in return.

Questions:
Do most developers spend $125/sf to renovate these mills? BH- in NC, spent about $100/sf, but spent more for projects in Northeast; market driven; 300 units at Loray- 95% came from outside the community, so project brought people in.
Where do you look to find new opportunities? BH- look everywhere; internet, historic designation, size; maybe get a broker to help do a listings search; they found Loray by doing a historic preservation search.
Can developers be fairly discriminating; everyone in the room probably has a mill to sell; comes down to money? BH-every state has their own process re developers; the risk is all in the construction financing- must assemble the funding in the front room; MA is not the easiest state to work with.
John M- Sanborne maps are a must from looking at history of mill; local champions are crucial; absentee landlord issue- mill owner must be present to really get the understanding of local economy, what can be supported; if town signs lease, it becomes equity, something developer can take to the bank (!). JM emphasizes it doesn’t have to be so difficult to get permitting in this state- [something that needs to be addressed in state]

**Eric Nelson – Lessons in Financing and Creating Public-Private Partnership Agreements**

Mastering Mills: Lessons in Financing. Westmass Area Development Corporation- a private/not for profit corporation with mission of creating jobs and taxes in Western Mass. Ludlow mills, Chicopee, MA- a brownfield mill; a historic mill redevelopment project is still a real estate project- investors expect a return, 10-20% annually, lenders expect to be paid
back, and developer expects to be compensated for their knowledge, effort, and risk; virtually all mill development projects are “upside down” from the start. At 1.5Msf, Ludlow mills is largest mill brownfield redevelopment site in the state. Challenges- physical limits: hazardous materials, limited parking available, non-functional buildings; economic constraints: limited market, high operating costs- cost of renovation exceeds costs of building new, but developer is in it for another reason (historic). Must do a market analysis, a pre-acquisition market feasibility study; develop a network of consultants, contractors, and tradesmen you can rely on; carry large contingency fund- things will come up.

Financing brownfield redevelopment projects: Sources include- owner financing, developer equity investment, net rental income, conventional loans, tax credits, grants (EPA, DA, MassWorks) (this developer relied a lot on grants). How to close financing gap- additional revenue from lease and sales, public cleanup and infrastructure grants, seek zoning changes (lower permitting costs), cost savings from utility upgrades and rebates, use low interest lending programs (MassDevelopement), utilize EPA assessment and remediation funds (brownfield assessment and cleanup grants), state remediation funding. Must leverage a mixture of sources. Historically, the mill’s 5,000 workers mostly all walked to work; parking now is a challenge. Mill is on 170 acres- 1.5 miles in length along Chicopee River. Mill has a Preservation and Redevelopment Master Plan in 2012; a zoning change incorporated expedited permitting. Mill 10 will be renovated into 75 senior independent living apartments.

Community Approach- spent 3 year due diligence. Partnerships are critical- community and neighborhood, political leaders and town boards, EPA Region One (Brownfield coordinator), MA Executive Office (2 depts), others.

JE- Interview 15: Lowell, MA- talked about a 15 ac re site; town worked closely with developer; had master developer on board to write the zoning- made a big difference.

KK-Kevin Kennedy- Director of Community Developer for Orange. Mill community, struggling economically; public/private partnerships are critical, but often difficult to establish. Partnership with Orange Innovative Center (Council?)- good example of rural redevelopment; KK is committed to showing town’s willingness to partner with prospective development, willingness to engage.

JM-Joeseeph Mullin- a developer. Talked about partnership with town of Maynard, Maynard mill redevelopment. Had an active working group with board members of town, neighbors; neighbors are important part of planning process- involve them up front. Were able to get parallel permitting- cut down on permitting time. 1.1Msf-Maynard Mill- everything about the mill was out of date (ADA, parking, etc.). Were lucky to get an anchor tenant up front- made a large difference in success of project. Important partners are the financial institutions- many were unwilling to lend due to lack of collateral; but finally found one (NeMorra?) (looked at/approached over 40 institutions). Tax payments to town- started at about $90K/year in 1997. Went to $200K by 20(12? 07?). Good investment on town’s part, but there were naysayers at first. In 2007, Monster (anchor tenant) decided to leave. Ended up having to divest last year because bank no longer supported them. New developer took over, got needed financing. That’s the way it goes in the development world.

Questions:
Physical limitations- how do you get around the limitations of the mills? Mark Tigan- sometimes, mills are just too, big- work with historic Preservation on how to keep historic component, but can maybe reduce size of mill. JM- keep an open mind; some parts of building may have to be raised.
How do you work with MA State Historic Preservation office who say no state dollars if any demolition occurs? JE- be proactive regarding demolition- may be able to repurpose timbers, masonry. MT- State Historic officer does have the authority to negotiate, so have rationale clearly figured out before you go- present case to open negotiation.

What is the failure rate in mills after financing is in place? JM- have to stay in the game, active- once you have financing, have to keep tenancy.

John Mullin- combining healthy cities with redevelopment of mills; community first approach is important- find out what community wants.

Steve Cecil – The Importance of History, Culture, and Design with Mills
Steve Cecil- Cecil Group-Boston, MA. Mills: History, Culture and Design- Linking Past, Present and Future. New England mills are artifacts of perishing cultures, of a design ethos. The buildings were built to last, were built as though they would always be there in the future. Contemporary trends in New England: innovation economy, open space and flexible everything (because entrepreneurial businesses tend to be small, and change rapidly); cultural venues, events, and food are often leading indicators of quality of life; attracting and retaining an educated creative workforce is important; and, values re historic preservation are changing. Case study- Gilbert and Bennett Mill Redevelopment in Redding, CT: Cecil Group prepared a study to establish a route to redevelopment of the mill. How to attract and retain an urban workforce? Quality of space (aesthetics important), quality of life, quality of work are interlinked and are critical to retaining the workforce. Other mill projects: working to preserve history, culture and design, figuring out what can be preserved, brought out to be iconic. Keys to success: Scaling project to community is important; Keep it simple; invite a support entrepreneurs, and stay flexible; focus on preservation efforts; embrace funkiness- this is core to what attracts people to these places.

Joe Laydon-Town planner in Grafton, MA- Grafton houses several towns. Trying to highlight the importance (to youth) the mills had in Grafton before knowledge is lost. Mills along the Blackstone River. Trying to accentuate the cultural, historic importance. Grappling with how to preserve the history while these building are undergoing redevelopment- getting it into school curriculum. Mill pond is major migratory stop- birders come from all over. These are the types of elements Grafton is using to highlight importance.

Hiram Peck- Planning Director in Avon, CT. Talked about some redevelopment in Simsbury. Avon development: 1.5Msf plan for redevelopment for mill building.

Interview 7- from MA Historical Commission, Director of Local Government Programs. “Buying Time for Heritage” –important book. Working with communities, trying to find out what the community wants- what is special, what needs to happen in order to be able to keep the things that are unique to the community. Deals with regulatory reviews; when there is a federal or state involvement in a project, reg review may be required. Their office houses state archaeologist, and rehabilitation and restoration grant programs. To communities: 1) identify historic resources, 2) what is significant, and 3) how to protect it. MHC has grants to help with this process. Preservation awards: something his office gives out. Rehabilitation is preferred term over restoration.

Questions:
Regarding attracting people- if these are places people are going to work (in mills), must have broadband. SC- no real answer, example to answer that; other than in rural settings, people attracted to that are more interested in interacting directly with people rather than through the internet.
Difficult to work with MA Historic (elephant in the room). What weight is given to community, local town commissions? CS- some, but not much weight. Just because town wants to tear something down, doesn’t mean it gets a lot of weight.

Follow up- how does commission evaluate this, make its decision? CS- balancing act; want to see the mill buildings to be occupied, to have an adaptive reuse; but, must be balanced out with state’s priority, criteria for rehabilitation.

Small towns have strapped resources; if towns are lacking in developing an inventory, lacking tools to make decisions, how can Historical Commission help local historical committees? CS- travels all over the state giving training sessions, on demand. Works with regional planning agencies more and more- just ask.

John Mullin- food and mills! Be wired or be gone- none of the mill projects he has worked on has been successful without broadband. What we need is a change at the legislative level to help figure out how to break down impediments to mill development.
14.3 MASTERING MILLS SYMPOSIUM ROUND TABLE DISCUSSION: TOP 3

April 12, 2016
Sierra Pelletier
Notes:
- Missing table numbers were condensed, moved to other tables
- Some tables were asked their top 1 of the 3, some were not
* denotes the top 1

TABLE 1
1. rural communities not having enough staff – state resources to help towns
2. Improve communication process with Mass Historical Commission, more transparency, more historical tax credits
3. Brownfields – accessing cleanup money once problem identified
[missed their star one – think she said having more money upfront?]

TABLE 2
1. blowing up entire credit system – tax credit concerns, pull them into one tax credit and one application, ‘mill tax credit program’, one stop shop
2. redevelopment program through bonding, work your way up list as you become more project-ready, will cover assessments for development and redevelopment, and if mill not seen as feasible, money for demolition and site stabilization
3. * state redevelopment permitting ombudsman, permanent person in charge of making sure all state agencies communicate and work together

TABLE 3
1. taxes and backtaxes and how old buildings get a lot of backtaxes on them with no forgiveness, so private investors don’t want to invest – way of forgiving if developers can show they’d put same amount of money toward restoration or something like that
2. codes – since many are constructed similarly, have a sort of standard handbook of structural issues buildings are likely to have, and solutions that have worked in the past
3. good to have statewide catalogue of mills, can submit photos, site plan, etc. If considering tearing down, have on this listing for certain amount of time first

TABLE 4
1. clearinghouse – categorized by state, would have different options people can choose from based on problems each mill has and types of success strategies that developers and community want to use, tied to grants, network of people with specialized knowledge
2. pilots and models of success more available to public
3. partnerships and new investment models that can be used with first developers, universities and other institutions to offer resources, foster partnerships in future, may have resources but not education to get involved, funding; student, professor and expert knowledge to make pilot models
TABLE 5
1. roadmap to help towns revitalize …[missed]…
2. database specific to mill revitalization, website maybe
3. similar to North Carolina system

TABLE 6
1. * fix historic tax credit process, it’s broken, get rid of $50mil cap for process, do carve-out of projects in cue to prioritize economic development over pretty
2. further identify funding that would help to identify and remediate environmental issues; often grants available for environmental remediation, more available to municipality and nonprofits and not as much for private developers
3. expand definition of historic mill, by-right get more expedited approval

TABLE 7
1. codes – North Carolina rehabilitation code, want clarification and consistency in MA
2. fix historic tax credit, have portion for mills only, raise cap, give upfront; similar to MassWorks where they want shovel ready, and fund as they come along
3. broadband and wi-fi, need it nowadays, working from home or remotely, high-tech jobs should be supported everywhere

TABLE 9
1. level playing field between urban and rural, different issues
2. guidance on single application process, tie into zoning perhaps; what should town require of developer, what’s way off mark. Need template to know headed in right direction
3. more technical assistance around mill redevelopment, public-private partnerships, help us work through working with developer, what are priorities to help us pursue

TABLE 11
1. single point of interface on state level, ombudsman
2. Improve historical tax credit process, increase cap
3. redefine to treat corridors as gateway regions, not just gateway cities

TABLE 12
1. * state tax credits should be separated from federal, increasing amount and funding
2. state revolving loan fund or mill restoration bond bill to generate more state funds to fill in gaps
3. code that offered alternatives for restoration to get past some …[missed, but pulled this from table 12’s discussion: ‘own criteria for state programs’]…
4. statewide guide on properties, status, vendor lists, etc. – [this was not stated at this time but was added as a 4th during table 12’s discussion]