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Forging Ahead: Towards an Arts Center in North Quabbin

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FORGING AHEAD:

Towards an Arts Center in North Quabbin



Photo Credit: Stephen Meno

Final Approval Date: 24 February 2016

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Landscape Architecture
& Regional Planning



1 TITLE PAGE

Title: Forging Ahead: Towards an Arts Center

Area of Study: North Quabbin Region, Massachusetts, USA

Brief Description: This report is a feasibility study to assess the potential adaptive reuse of mill buildings in the North Quabbin region as a site for an arts education center that would specialize in large-scale sculpture fabrication. This report relies on interviews with experts and conducting case studies on similar instances of creative economy revitalization.

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2 EXECUTIVE SUMMARY

Title of Study: Forging Ahead: Towards an Arts Center in North Quabbin
Consultants: Leonard Kendall and Stephen Meno
Study location(s): North Quabbin Region (specifically Orange and Athol, MA)
Studied period (years): Fall 2015
Purpose: To determine the feasibility of creating an Arts Education Center catering to large-scale sculpture fabrication in North Quabbin, contributing to the revitalization of the region.
Methodology: Case studies of other arts centers as economic revitalization engines, as well as interviews with town planners, artists, and educational consultants.
<p>Summary of Results and Conclusions</p> <p>Analysis: There are many instances where creative economy strategies focusing on arts production and sculpture parks have revitalized areas. Usually, the success of these places was facilitated by anchor institutions, such as universities and state funding. Many of these institutions also succeed because they adopt a multi-prong strategy that appeals to a wide range of demographics. Orange’s proximity to 41 academic institutions that have sculpture programs, but lack large-scale metal foundries, would fill a market niche.</p> <p>Recommendations: Further research is needed, but so far, there is ample evidence to support the feasibility of establishing an Arts Education Center in North Quabbin. The proposed center would include a large-scale foundry, a museum, live/work space, classrooms, and a sculpture park. Several of the locations mentioned in this report, especially the Rodney Hunt and Tire Barns Realty Trust sites, both located in Orange, have particular characteristics that are strong candidates for the project’s implementation.</p> <p>Next Steps:</p> <ul style="list-style-type: none"> • Research the Holyoke High Speed Computer Center as a model for creating a consortium between universities, which would direct management and funding. • Research the Kohler Facility in Wisconsin for the potential of an industrial connection with this project. • Research economic spillover effects of arts-educational clusters on the surrounding community. • Investigate the energy requirements for the Foundry and the potential for alternative fuel sources such as hydropower and biochar. • Begin a community engagement strategy to generate support from local residents and other pertinent stakeholders. • Identify additional sources of funding by targeting investors and regional educational institutions. • Enact regulatory changes into the town of Orange’s zoning bylaws to better attract developers. <p>Conclusions: An Arts Education Center focused on metalworking would appeal to the local community character of the North Quabbin and is a valid revitalization strategy to improve the region’s economic standing.</p> <p>Date of the draft: 24 February 2016</p>

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5 LIST OF ABBREVIATIONS AND DEFINITIONS OF TERMS

CARD	Commercial Area Revitalization District
CDBG	Community Development Block Grants
EDA	Economic Development Administration
EDD	Economic Development District
HUD	Department of Housing and Urban Development
ISC	International Sculpture Center
Mass HED	Massachusetts Executive office of Housing and Economic Development
Mass MOCA	Massachusetts Museum of Contemporary Art
NEA	National Endowment for the Arts
PDA	Priority Development Sites

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7 INTRODUCTION

The North Quabbin region of Massachusetts (see Figure 1) is an area in need of economic revitalization. In order for the North Quabbin to reimagine its economy in an era of declining industry and population loss, a multi-prong approach is necessary. While other current redevelopment projects range from regulatory overhauls to ecotourism plans, the use of the arts is one of the main strategies to improve the North Quabbin’s economy.

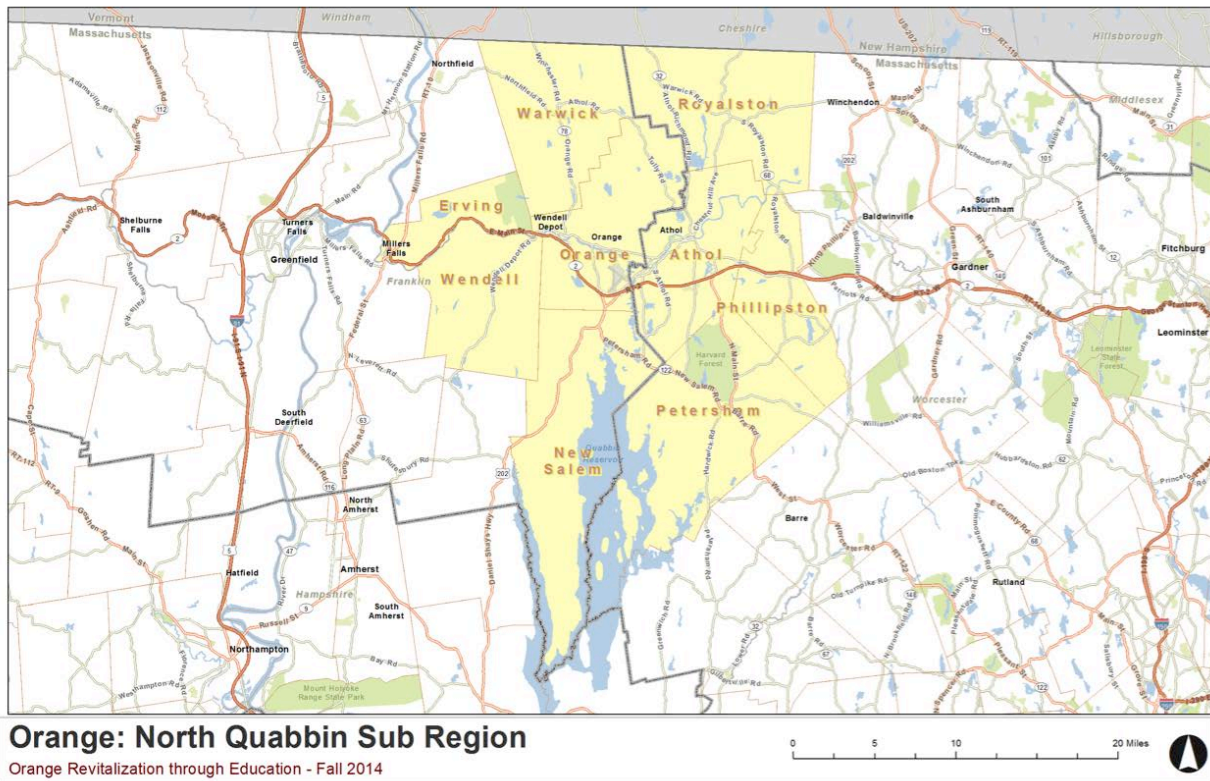


Figure 1: North Quabbin Sub Region

Originally developed by economic and urban studies theorist, Richard Florida, the creative class strategy relies on the use of the arts and attracting creative individuals to regenerate regions. Promoting the arts has positively affected the U.S. economy. According to Americans for the Arts, “America’s nonprofit arts industry generates \$135.2 billion in economic activity every year, resulting in \$22.3 billion in federal, state, and local tax revenues (p ii).”¹

Furthermore, the National Endowment for the Arts (NEA) has found that “tax-exempt performing

arts groups, museums, and schools of the fine arts together contributed \$12.1 billion to the U.S. economy in 2012 (p 1).² Within these groups, museums, and similar institutions employ 106,400 people, while fine arts schools employ 12,000 people (see Figure 2).

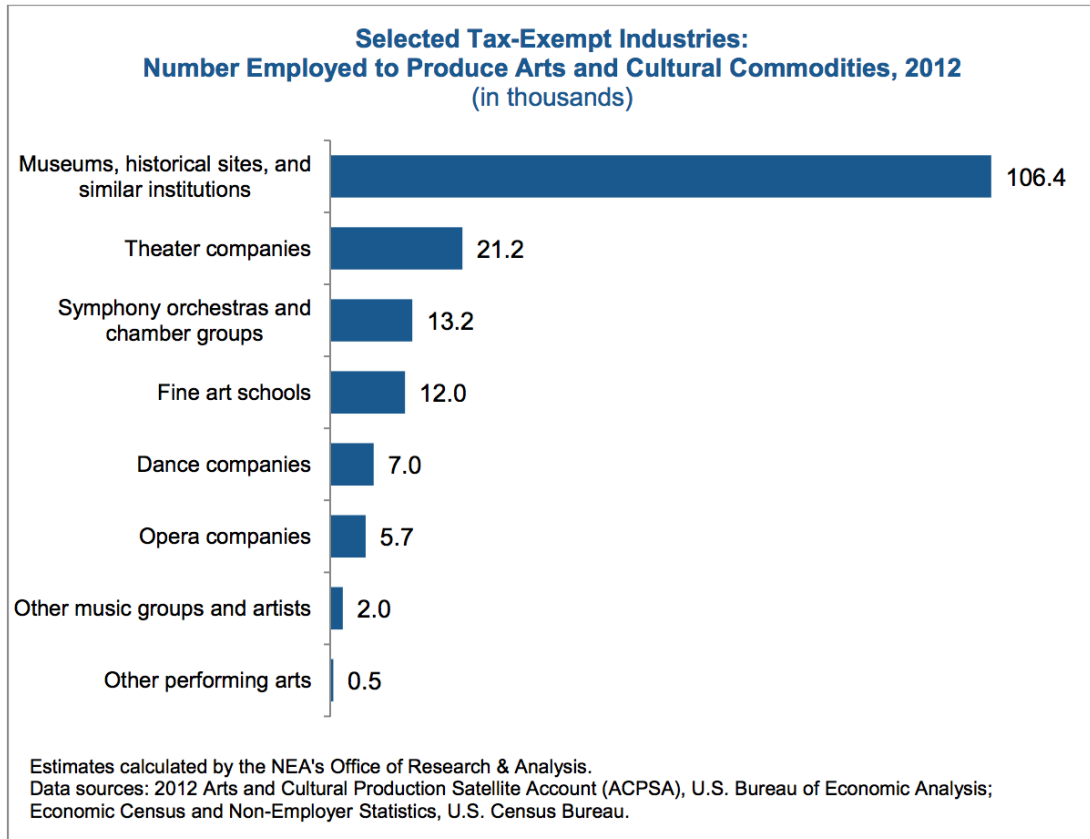


Figure 2: Selected Tax-Exempt Arts Industries

Art-based economic revitalization (also known as promoting the creative economy) shows great potential for North Quabbin, especially in one of the major towns, Orange (Figure 3). As one of the major industrial centers and mill towns of the North Quabbin, Orange has faced a recent decline of its industrial economic mainstays. The latest example in this trend is the relocation of Rodney Hunt Corporation (which produced products for water treatment and hydropower technology), announcing it will cease operations at its Orange plant by the end of 2015, resulting in a loss of 200 jobs.³ Clearly, with such massive layoffs, Orange will need another economic anchor to promote prosperity in the town. And while the loss of Rodney Hunt

is a threat to Orange’s vitality, the foundries and manufacturing tools left behind in the plant could be used to create art, especially large-scale metalwork.



Figure 3: Orange Location

Artists create works in foundries, forges, and kilns. For the sake of this paper we will be referring to the site location as “the Foundry” or the “Arts Education Facility.” We will be referring to this as the Foundry because in the Tire Barns Realty Trust building there is a foundry where metal was shaped and created.

A foundry is a factory where metal is melted down and gets cast into molds in order to create a new piece of metal after cooling. A forge is a type of hearth where metal is heated up until it is pliable and can be shaped and hardened. A kiln is a machine that is set to a certain temperature in order to dry out pieces of clay into sculptures, pottery, tiles, or bricks.

The Foundry site that we are discussing in Orange has large-scale foundry capabilities. Within the building there could be room to house both a forge and a kiln in order to incorporate different mediums for art to be created as well as for metal to be cast in the foundry.

8 PURPOSE

This study is an analysis of the feasibility of constructing a large-scale sculpture fabrication and education facility in the North Quabbin region of Massachusetts to serve as a hub for the region's creative economy. It is one of several projects initiated by Dr. John Mullin of the Center for Economic Development (CED) at the University of Massachusetts, Amherst, to stimulate economic revitalization for the region. This study was conducted by Dr. Mullin's graduate economic development practicum class members. It builds upon the work of a previous study, *Orange Arts and Economic Development: Identifying Non-Traditional Innovative Educational Opportunities for Economic Development in the Town of Orange, Massachusetts*, conducted in the spring of 2015 by UMass Regional Planning graduate student, Brendan Conboy, and Hampshire College undergraduate student, Michael Goulding. This previous report focused on "identifying innovative and educational opportunities that promote economic development strategies for the town of Orange, Massachusetts."⁴

One of recommendations from the previous report was the establishment of a large-scale sculpture fabrication and education facility in the North Quabbin. One site identified as a prime candidate to house this facility was the Tire Barns Realty Trust building located on West River Street, as it houses a foundry. The report relied heavily on previous case studies, such as the Massachusetts Museum of Contemporary Arts (Mass MoCA) in North Adams, and the Montserrat College of Art in Beverly. The authors of the previous report recommended forming a partnership to begin to apply for funding to help transform the Tire Barns Realty Trust site into an educational facility and help re-brand Orange as an arts-centered community.

Building upon the recommendations of the previous report, this report will examine the features of the Tire Barns Realty Trust site and what improvements would be needed in order to execute the project. This report examines what niche this facility could fill in the regional arts economy and what assets are in the region that would contribute to the facility's success. Furthermore, this report will detail funding to achieve these goals and potential partnerships that could facilitate the development of this project.

9 GOALS AND OBJECTIVES

Our primary task has been to assess whether the North Quabbin (and specifically the town of Orange) is a good candidate to host an arts fabrication and educational facility. The creation of a facility affiliated with regional cultural and education institutions is one strategy that can help better position Orange to attract development and younger people.

9.1 GOALS

- Help to build upon the uniqueness, specialty, and cachet already present in Orange and the North Quabbin to further develop artistic and cultural institutions.
- Generate reinvestment in downtown Orange and reduce the vacancy rate by attracting businesses that fit within the local character.
- Fill a need for artists who wish to fabricate large-scale metal sculptures.
- Support nearby educational institutions that lack casting, forging and kiln facilities for their students' and faculties' artistic endeavors.

9.2 OBJECTIVES

- Identify best practices and other successful examples of arts fabrication and education facilities as economic drivers.
- Identify multiple sites that may meet the needs of the Arts Education Center.
- Meet with stakeholders and experts to analyze all facets of this process.

10 METHODOLOGY

This study follows the CED's three-pronged process: 1) Inventory, 2) Analysis, and 3) Recommendations.

10.1 INVENTORY

The inventory process consists of collecting data and information that pertain to the study area of Orange, the surrounding North Quabbin communities, and western Massachusetts. This task has been accomplished through site visits to downtown Orange to document and physical and cultural features. Demographics data have also been gathered from the U.S. Census Bureau. Case studies and additional research regarding the arts, the creative economy, sculpture parks, and construction costs have been drawn from scholarly journals and reports from arts organizations that detail the economic impact of arts on the regional and national economy. Interviews were also conducted with experts in the fields of town planning, educational institution creation, and arts entrepreneurship.

10.2 ANALYSIS

The analysis process consists of taking the data that has been gathered from the inventory stage and applying it toward examining the feasibility of establishing an Arts Education Center in Orange and North Quabbin. This has included examining case studies and literature to best identify the strengths, weaknesses, opportunities, and threats to creating the center in Orange. In general, case studies have been selected from similar scale sites as well as those with similar features. Construction costs were analyzed using the RSMeans index of square foot costs and landscape cost data.

10.3 RECOMMENDATIONS

The recommendation that is presented in the final components of this report is drawn from the conclusions presented by the analysis phase. The recommendations take into account the local and regional contexts and demand for an Arts Education Center in Orange. It lays the

groundwork for next steps in terms of actualizing and implementing the project. While this report advocates for the creation of an arts facility that caters to sculpture and metalworking, the approach is flexible and can be tailored to a number of arts endeavors.

11 CONTEXT AND BACKGROUND

Straddling Franklin and Worcester counties, the North Quabbin region comprises nine towns. Rural in nature, these towns' economies were typically built around mills that were powered by local river and lumber resources. A transforming event for the region was the creation of the Quabbin Reservoir between 1930 and 1939 to supply drinking water to the Boston metropolitan area. During this period, the towns of New Salem and Petersham lost large swaths of land, while the towns to the south: Greenwich, Enfield, Dana, and Prescott, were discontinued. While it did not lose land area, Orange's relation to the surrounding towns significantly changed due to alteration of north-south roadway patterns, contributing to the region's growing isolation. Furthermore, the creation of the new Route 2 in the 1950s diverted traffic from North Quabbin towns' downtown and isolated these communities even further.

Orange is one of the two major towns in the North Quabbin region, with a population of 7,839 (the other being Athol in western Worcester County with a population of 11,584).⁵ The town's natural features provide inspiring scenery. The steep hills north of the downtown, showcase beautiful overlooks of the Millers River, which flows through the town. Although the center of the town has a strong urban and industrial atmosphere, the surrounding areas are forested and reminiscent of many New England mill towns.

Orange and Athol both have a legacy of innovation in their communities, especially in the field of metalworking. Orange is also known for the New Home Sewing Machine factory, which was established in Orange in 1867, producing the single thread hand sewing machine as well as the home shuttle, which was the largest employer for Franklin County during the latter part of

the 19th century. Orange is also attributed with being the location of the first automobile factory in the United States, producing the short-lived Grout steam-powered car from 1899 to 1912.⁶

11.1 EXISTING CONDITIONS

11.1.1 Overview

Orange and the North Quabbin's economically depressed status is largely due to the fact that its economy was based on an old manufacturing model, which was arranged vertically, where all components of the business, from production to marketing to distribution were located in the same or nearby facilities. This type of business model is highly susceptible to shocks of economic restructuring taken place over the last few decades, of which the primary example is outsourcing of production to southern states or foreign countries. The loss of commuter rail service along the northern portion of western Massachusetts as well as limited public transportation options to the town center also contribute to Orange and the North Quabbin's sense of isolation.

11.1.2 Population growth and age distribution

Unlike many of the surrounding towns in the North Quabbin, Orange is unique as it has experienced population growth since 1990. Orange's median age of 41 years old is lower than Franklin County's average of 44.3 years-of-age, and higher than the state average of 38.1 years-of-age. This somewhat older median age can be reflected in Figure 4, which details the age distribution in the town and shows a small percentage of young people. In fact, the low percentage of people 18-24 years-of-age (5%) is half of the state average (10%), suggesting that Orange lacks job opportunities and other amenities that would attract and retain younger populations in the town.⁷ While the lack of younger people in Orange is a possible threat to the success of the Arts Education Center, a 2002 Survey of Public Participation in the Arts found that the national average age of art event and workshop attendees was 46 years.⁸ As Orange does have a high percentage of residents that fall within this age range, there is an opportunity

for a strong customer base and interest in attending and supporting community workshops related to metal fabrication, or potentially even kiln production.

Age Distribution – Orange 2008-2012

Age	Percent
FRCOG. Greater Franklin County 2014 Comprehensive Economic Development Strategy (CEDS) Annual Report. 2014. P. 10	
Under 18	24.3
18 to 24	5.4
25 to 44	24.4
45 to 64	30
65 and over	15.9

Figure 4: Age Distribution in Orange

11.1.3 Employment and income

Orange’s current unemployment rate of 7.9% is considerably higher than the County average of 5.1% and the state average of 5.7% (see Figure 5). While this is a notable decrease from the unemployment high of 10.7% during the 2009 Economic Recession, Orange’s unemployment rate is expected to increase since Rodney Hunt announced the cessation of 200 jobs at their plant by the end of 2015.

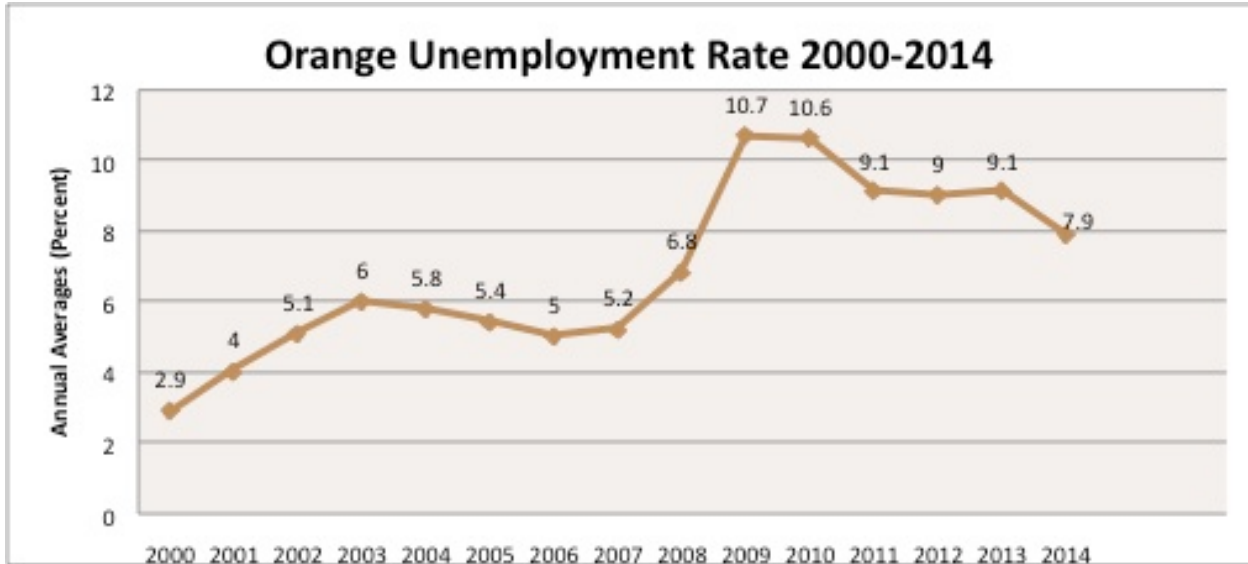


Figure 5: Orange Unemployment Rate 2000-2014

In addition to high unemployment rates, low incomes have also been a barrier to development and revitalization in Orange. The town of Orange is ranked as having the lowest income of all municipalities within Franklin County.⁹

11.1.4 Educational Attainment

Orange’s highest average educational attainment is high school graduation, followed by completion of some college, which are both above the county and state averages. While Orange is falling behind the state in percentage of people 25 and older who have bachelor’s degrees, it is ahead of the county. Residents 25 and older who have a graduate degree in Orange are almost non-existent (Figure 6).

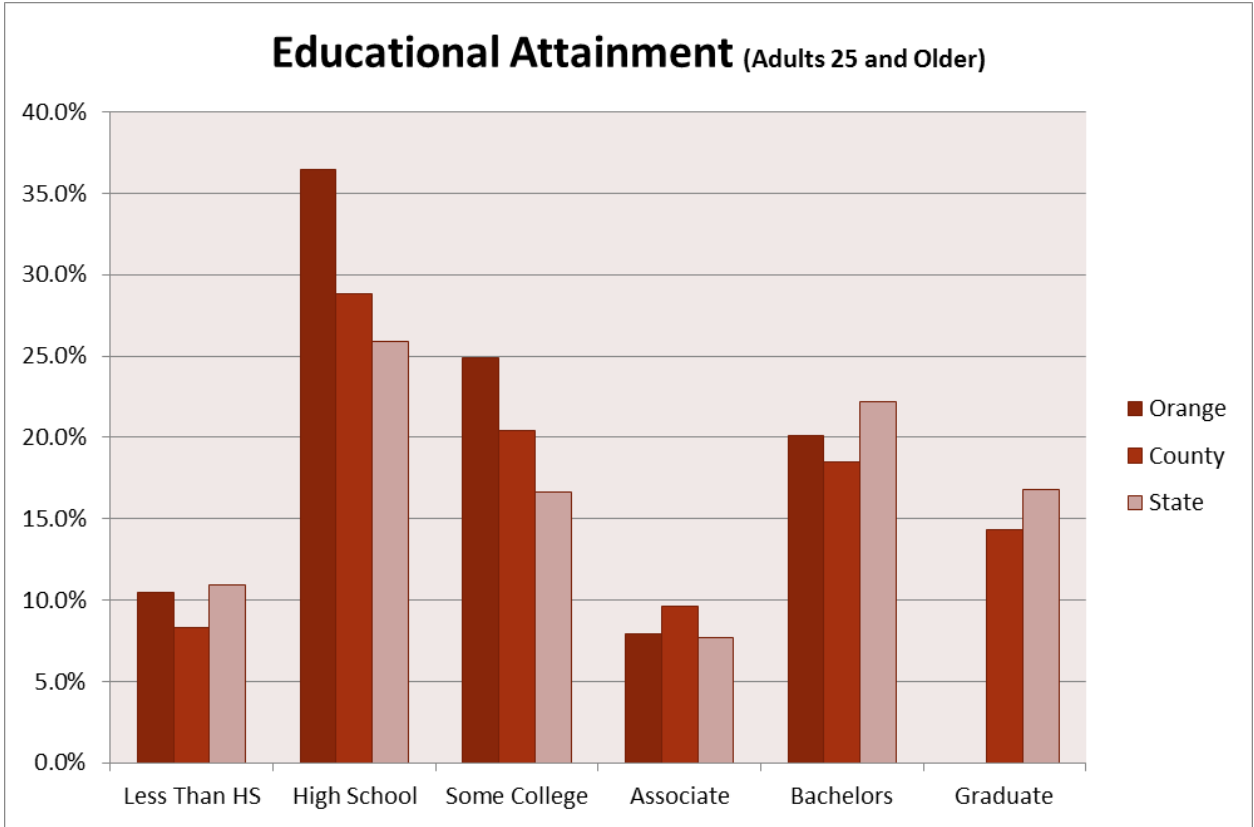


Figure 6: Educational Attainment

(Source U.S. Census ACS 2008-2012)

11.1.5 Local Arts Industry



Figure 7: Images of Public art in Orange

(Sources: Stephen Meno and Paul Franz)

Considering the degree of local arts activity in Franklin County and the North Quabbin, a creative economy revitalization strategy is very fitting. There are 64 arts-related businesses in the second Franklin congressional District (Figure 8), which comprises the nine towns located in the North Quabbin as well as the town of Gill. This chart includes only businesses registered with Dun and Bradstreet, so the estimate is low; nevertheless, it demonstrates that at least 3.6% of businesses in this district are related to the arts and entertainment industry.¹⁰



Figure 8: Map of Arts-Related Businesses - Second Franklin Congressional District

While many of the arts-related businesses skew toward performing arts and are not directly art school services or visual media, these data demonstrate an artistic culture that is already drawing creative types to the North Quabbin region and Franklin County. In fact, Franklin County has a higher percentage of arts-related workers (2.8%) than does the whole of Massachusetts (2.1%) or the United States (1.9%) (see Figure 9).

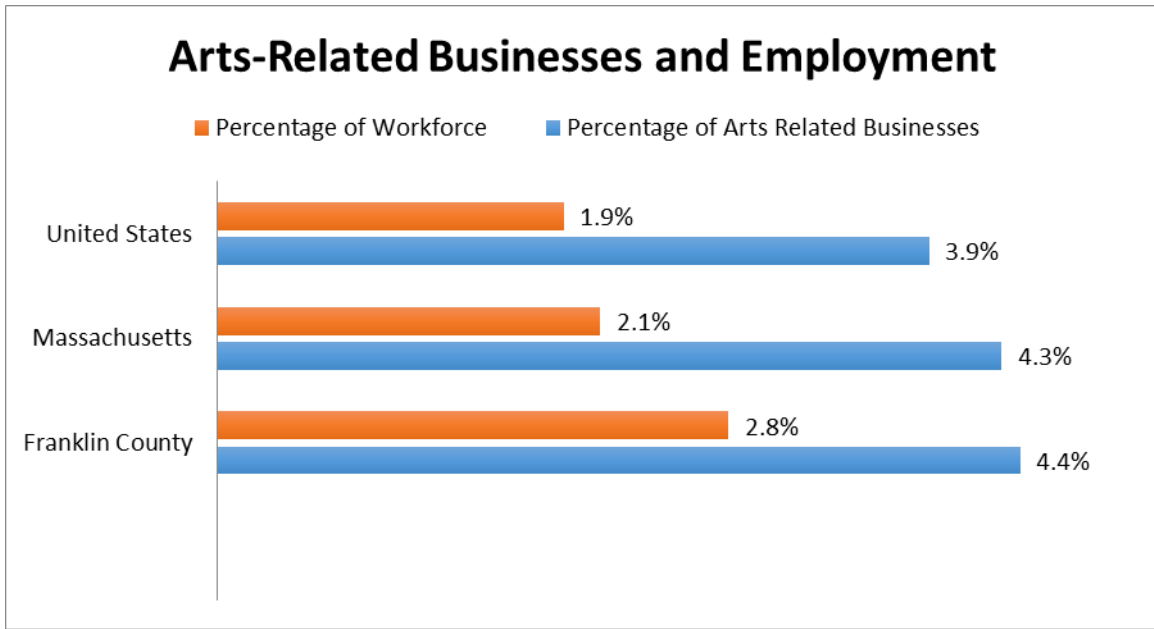


Figure 9: Arts-Related Businesses and Employment

(Source: FRCOG. Greater Franklin County 2014 Comprehensive Economic Development Strategy [CEDS] Annual Report. 2014. p. 10)

Orange is host to many local and regional festivals, which act as a draw for the region. These festivals include the North Quabbin Garlic and Arts Festival, the Celebrate the Harvest Fair, and the Orange Solstice Riverfest. Adding to these events could draw people in year-round, providing regular recognition and possible business to the local artists using the foundry. Furthermore, these festivals create the potential for there to be sponsored competitions that large-scale sculptors could compete in. Usually, during these events, the designs are shipped to the location of the competition and are fabricated on site. The Arts Education Center, along with the open space surrounding the site, would be very accommodating for these competitive events.

There are also many other amenities in Orange and the North Quabbin that make it make it a prime location to benefit from a creative economy. North Quabbin’s towns are within 100 miles of five state capitals. There are 44 nearby art museums in Massachusetts, 32 in Connecticut, 10 in New Hampshire, 14 in Vermont, 9 in Southern Maine, 8 in Rhode Island, and 39 in Eastern New York. Massachusetts has the highest number of outdoor statues of any state with

1,687.¹¹ There are also 29 registered sculptors with the International Sculpture Center (ISC) in Massachusetts, 9 in Vermont, 4 in Rhode Island, 20 in Connecticut, 2 in New Hampshire, and 5 in Maine. These numbers do not include many independent sculptors in the region who have not registered with the ISC.¹²

11.1.6 Academic Institutions

There are 41 colleges and universities that offer a sculpture program within the Northeastern United States, ranging from Maine to Western New York and southerly to New Jersey that require their students to use a foundry as part of their coursework. Figure 10 shows the majority of these schools and their relation to Orange, the orange star represents the town of Orange and the green points are the locations of the surrounding sculpture programs.

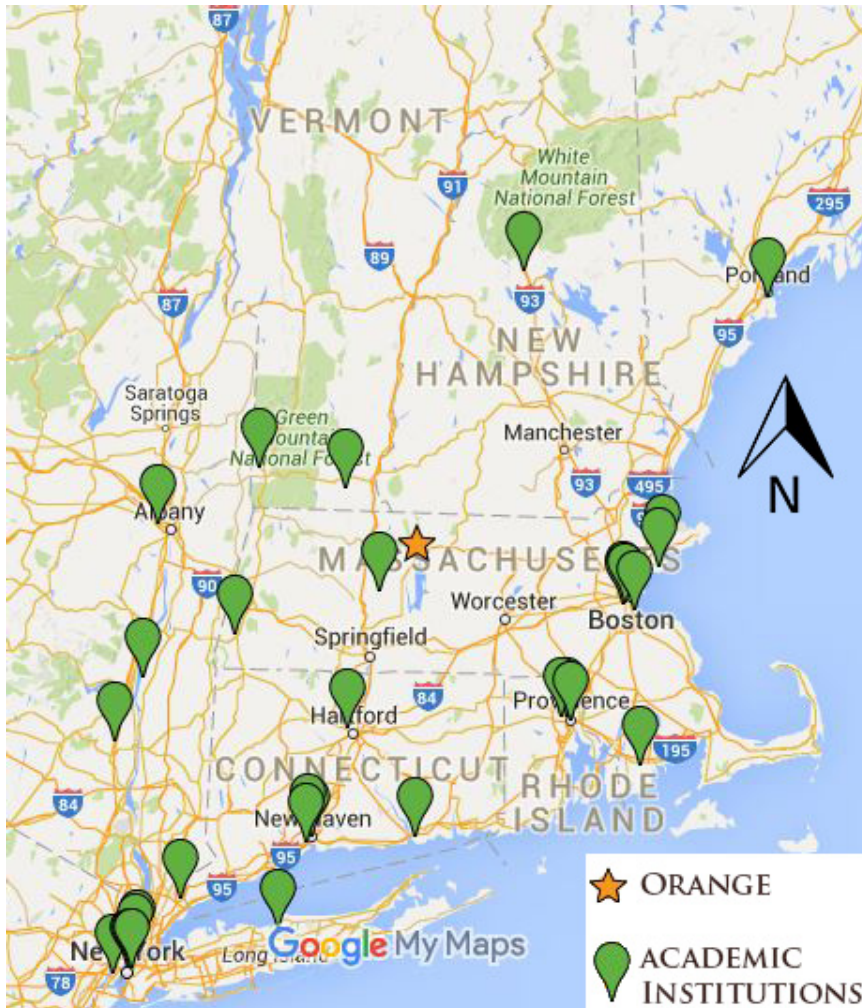


Figure 10: Academic Institutions in the Northeast

These academic institutions would be able to use the large scale foundry and would be the customer base for the Orange Arts Education Center. The academic institutions would be able to collaborate with the Orange Arts Education Center to give students from all across the Northeast a centralized location where large-scale sculptures could be made and fabricated.

Based upon preliminary research, there is no forge facility capable of forming large sculptured objects in New England. Many of these objects have had to be “fired” as far away as Pittsburgh and, in some instances, as distant as China. The University of Massachusetts had a foundry until 2003, when a fire destroyed it.¹³

11.1.7 Nearby Foundries

There are few nearby foundries that currently operate. The Royalston Arts Foundry is a small-scale foundry in Royalston, Massachusetts, which offers casting services to the artistic, industrial, and commercial community. They offer a wide variety of services for the casting of metal objects up to the size of a life-sized person.¹⁴

The Beacon Fine Art Foundry in Brewster, New York, is a foundry that specializes in casting bronze statues. They employ a number of services including mold making, wax making and rework, gating, shell building, burnout, pouring, finishing, and putting patina on the metal.¹⁵

Collaborating with the skilled metal workers and artists in the area would greatly help the Arts Education Center create a footing in the community. It could also act as a space for regional artists to come together to confer, collaborate and teach workshops on a variety of media within the arts.

11.2 STUDY AREA

The site of the proposed Arts Education Center is located just south of downtown Orange, Massachusetts, abutting the Millers River on a piece of property that has two mill buildings on it. The location is within walking distance of downtown Orange (see Figure 13). The building located further to the east and nearer to the bridge to downtown is the old Orange Foundry Inc. building, which is currently known as Tire Barns Realty Trust. This building houses the foundry

where most of the large-scale sculptures would be fabricated. This building dates back to 1883 and has large entrances including truck access.



Figure 11: The Tire Barns Realty Trust Site



Figure 12: Erving Paper Mill Building

The other building that is located to the northwest of the foundry building is the Erving Paper Mill. This building, which has a saw-tooth roof that is a unique character to the old mill, also has

access for trucks, although the current envisioned purpose for this building is as either classrooms or live/work studio space for artists in residence.



Figure 13: Site Location: the Foundry & Mill

The Foundry and the Erving Paper Mill are currently underused, primarily for storage. The owner of the Foundry is open to negotiations for the purchase of the site. The site has ample water and sewer capabilities and has potential for fiber-optic communication. This site is also connected to the electric grid, which the nearby New Home Sewing Machine Company Dam may be able to help supply power to (see Figure 14). Both the Foundry and the Erving Paper Mill are currently located in Orange's Commercial Area Revitalization District (CARD), which currently has no parking requirements and is home to three Priority Development Sites (PDS) in the town's downtown.

The New Home Sewing Machine Company Dam is located on the Millers River between the Foundry and the West River Street Block of buildings, which is designated by Orange as one of three Priority Development Sites (PDS) in the town. The dam is a run-of-river facility with a total capacity of about 455 kilowatts. It has three turbines, two of which are from the 1940s and the third is from 2010. The dam has the possibility to supply electricity to the Arts Education Center as long as hydropower policy allows it to sell its excess power to the electrical grid in Orange.

The hydropower policy is currently being studied.



Figure 14: The New Home Sewing Machine Company Dam

Due to its legacy in manufacturing, this site is a brownfield that will require thousands of dollars to assess for contamination and then to remediate for occupancy. Although there is a significant cost for brownfield cleanup, the state of Massachusetts offers a large variety of funding support for brownfield redevelopment. We mention funding opportunities later in this paper.

It is important to note that this project is a live project and that the buildings that we are discussing could be sold and lost at the discretion of the owner. Because of this, we have looked at two other possible sites; the Rodney Hunt Company's facility, which is located in Orange just a half-mile east of downtown Orange, and LP Athol Corporation which is a

360,000-square-foot mill in downtown Athol, Massachusetts, just five miles to the northeast of Orange (see Figure 15 and Figure 16).



Figure 15: Rodney Hunt Facility in Relation to the Foundry Site



Figure 16: LP Athol Corporation in Downtown Athol, MA

Rodney Hunt will cease operations at the Orange facility by the end of 2015 and will eliminate upwards of 200 regional jobs. This site is a prime candidate to house the Foundry as it currently has a foundry that is operational and is directly located on rail tracks.



Figure 17: Railway tracks adjacent to Rodney Hunt facility (on right)

Other amenities that make the North Quabbin a prime location for the Arts Education Center is the Pan Am Railways that runs through both Orange and Athol with freight capacity for materials and goods (see Figure 18). The north-south transfer points are located approximately 15 miles west in Greenfield and Deerfield. Both Orange and Athol have excellent highway access via Route 2, ensuring minimal difficulty moving these large objects by truck. Also Orange has a municipal airport which could transport goods as well.

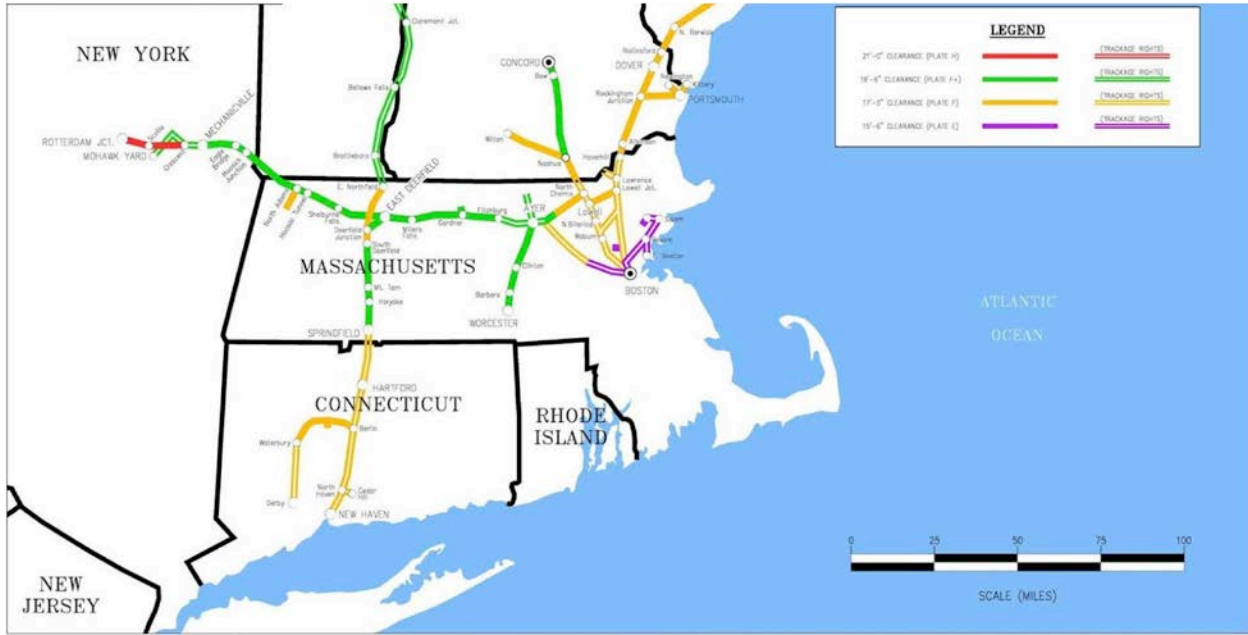


Figure 18: Map of Pan Am Railway Lines

12 CASE STUDIES

12.1 CASE STUDY 1: PITTSBURGH GLASS STUDIO

One of the best examples of how a fabrication space and studio can help revitalize a community is the Pittsburgh Glass Center. The enterprise was originally conceived in 1991 by David Stephens of the Pennsylvania Council on the Arts, who approached Ron Desmett and Kathleen Mulcahy, two local glass artists, who were also professors at Carnegie Mellon University. Pittsburgh was chosen as the site because of the presence of Carnegie Mellon University and University of Pittsburgh and because the nearest glass art facility was located 275 miles away in Corning, New York. In addition to the state funding, the \$2.5 million project was funded with gifts from Heinz Endowments, R.K. Mellon Foundation, the Pittsburgh Foundation, and the Urban Redevelopment Authority.¹⁶ The project was completed in 2001.

Currently, the state-of-the-art center boasts an international reputation. It functions as a nonprofit, public-access school, gallery, and studio. In 2012, the Glass Center purchased nearby housing units to create an artist-in-residence program. This center is now the cornerstone of the Penn Avenue Arts Initiative, which led to the Penn Avenue Arts District in an

effort to revitalize an underutilized section of the city. It is considered a catalyst for further development in the neighborhood, such as the building of the Glass Lofts apartment building. As of 2012, the Center has a \$1 million operating budget and a staff of 10 full-time employees.¹⁷

12.2 CASE STUDY 2: DECORDOVA SCULPTURE PARK AND MUSEUM, LINCOLN, MASSACHUSETTS.

DeCordova Sculpture Park and Museum in Lincoln, Massachusetts, is the largest sculpture park in New England, covering about 30 acres. It incorporates large-scale sculptures in its continuously changing exhibitions. This model incorporates a museum into the sculpture park, allowing other forms of art to be shown, such as photography and paintings.



Figure 19: DeCordova Sculpture Park and Museum

(Source: blog.larakimmerer.com)

12.3 CASE STUDY 3: STORM KING ART CENTER, NEW WINDSOR, NEW YORK.

The Storm King Art Center in New Windsor, New York, is a 500-acre open-space park filled with large-scale contemporary sculptures. The Storm King Art Center is also a museum and it is considered to be one of the leading sculpture parks in the world. It is located about an hour north of New York City, which is similar to the car-travel time between Orange and Boston.



Figure 20: Storm King Art Center

(Source: wahttodigital.com)

12.4 CASE STUDY 4: SOCRATES SCULPTURE PARK, LONG ISLAND CITY, NEW YORK.

Socrates Sculpture Park in Long Island City, New York, is the only dedicated space in the New York metropolitan area for artists to create and exhibit large-scale sculptures and multi-media projects. The four-acre park on the East River is home to GrowNYC's Greenmarket, which provides the community with a market for fresh fruits and vegetables during the summer months. Socrates Sculpture Park is a former landfill, which relates to Orange due to the fact that the current mill buildings on site are brownfields and would need to be cleaned up and remediated before any of this redevelopment could occur. The park offers educational programs for children and adults, as well as an outdoor theater for screening movies for the

community. This is a great case study for the town of Orange due to how much it overlaps in offerings.



Figure 21: Socrates Sculpture Park

(Source: nycgo.com)

13 ANALYSIS

Regulatory Changes:

In order for Orange to permit this type of development, their master plan and zoning by-law must be updated. The town of Orange currently does not have arts-specific uses and definitions in the by-law. Having these terms in writing will show developers that the town is ready for this type of development to take place. If the town includes uses such as museums and sculpture parks within the by-law, developers and investors will face fewer complications when trying to build the center, which will be an incentive for construction.

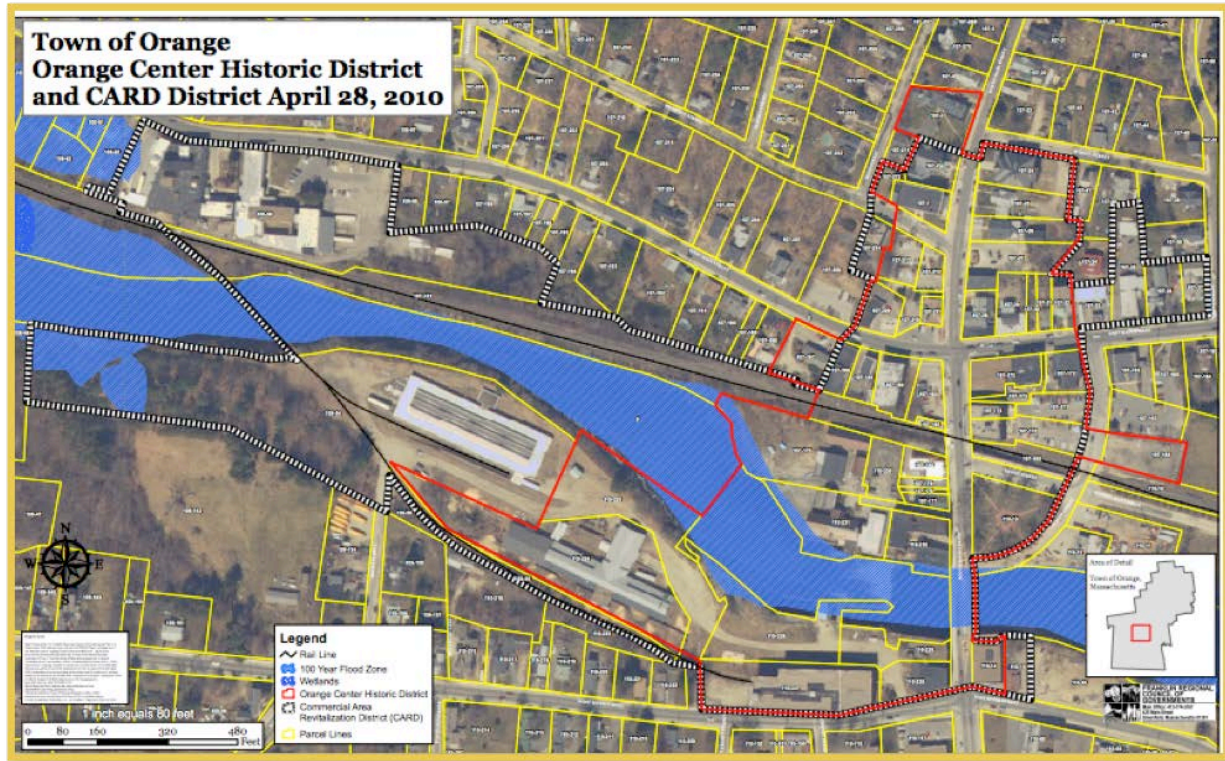


Figure 22: Commercial Area Revitalization District (CARD) Map

The CARD (Figure 22) currently has incentives to promote development inside its three Priority Development Sites (PDS). These three sites are all located within the downtown area of Orange and are designated a) PDS 1: Putnam Hall Block, b) PDS 2: South Main Street Block, and c) PDS 3: West River Street Block. The West River Street Block is located closest to the Foundry site and these are the sites where the arts-centric development will likely occur.

According to a survey conducted among the residents of Orange in 2002, the top priority listed was economic development focusing on the downtown. Therefore, one of the goals of the 2005 Master Plan is to “support the vitality of the downtown area and promote the re-use of underutilized or vacant commercial and industrial sites.” Orange also lists “the development of tourism-related businesses” as a way to sustain the economy.¹⁸ This kind of development is intended to promote economic growth that helps sustain Orange’s historic, scenic, and natural resources, and to provide high-quality employment opportunities for residents.”¹⁹ The proposed project manifests this vision, spurring the economic vitality of Orange’s downtown by providing

jobs for the highly skilled metal workers in the region, who would help artists create large-scale metal sculptures. This initiative would also help to create a cultural and heritage tourism destination in downtown Orange, with the help of the proposed museum and sculpture park.

Furthermore, one approach to incentivize development is to lease the land on the proposed site to the town of Orange for one dollar per year for 99 years, while the anchor institutions in the Foundry would rent space from the town for 40 years. This arrangement would foster commitment to the project by the major stakeholders.

Vision as an Arts Cluster:

The Foundry itself would be rented by the universities and individual working sculptors through a “time-share” program. Adjunct to the forge would be the classrooms, offices, work spaces, and residential spaces for academics, students and professional sculptors. Outside of the buildings would be a sculpture park juxtaposed to the river that houses both finished and objects “in the works.” The site would be connected to downtown via both vehicular and pedestrian bridges. Restaurants, shops and apartments would be drawn to locate here to meet the new traffic and demand. Moreover, other creative schools, galleries, and arts-related shops would be recruited, along with market rate and affordable housing.



Figure 23: A 2014 MassWorks Application to Help Transform Orange into an Arts-Centered Community

In order to advance this vision, the Orange Community Development Department is applying to many differing funding sources. The Community Development Director, Kevin Kennedy, has already received a \$20,000 grant to begin construction of a bike and pedestrian path around the proposed property that would connect it to the Orange Innovation Center, a nearby rehabilitated mill that currently acts as a maker’s space. In addition to other grants he has applied for (see Figure 23), Kennedy is waiting to hear on the status of a grant for \$600,000, which would further contribute to the transformation of Orange into an arts-centered destination.

Sculpture Parks:

A sculpture park is an open space dedicated to showing different sculptures or pieces of art. A sculpture park in connection with the Arts Education Center would provide another attraction to draw in diverse customer base apart from just artists and students, thus helping to stabilize the Arts Education Facility’s income.

Innovative Technology:

In addition to metal fabrication, the Foundry could also host innovative technologies that are becoming increasingly popular in the artist community. One such medium is 3-D printing, in which successive layers of material are formed under computer control to create an object. The cost of metal-producing 3-D printers range from \$50,000 to \$1,000,000, although most are typically in the \$250,000 to \$500,000 range.²⁰

Costs and Revenue:

Based on data from the RS Means Index for Construction Costs,²¹ it is estimated that \$5.5 million will be needed to rehabilitate the potential building located in Orange. To create the amount of capital needed to fund this construction project, outside funding as well as revenue streams will be necessary.

The operational costs of running a foundry very much depends on its size and capacity. The American Foundry Society has created an organization chart (Figure 24) that shows a scalable breakdown of costs associated with operating a foundry. Clearly, labor and raw materials are the largest portions of the costs. The energy costs of the foundry may be subsidized if the Arts Education Center utilizes alternative energy measures, such as the nearby hydropower dam.

Source: DOE/EIA

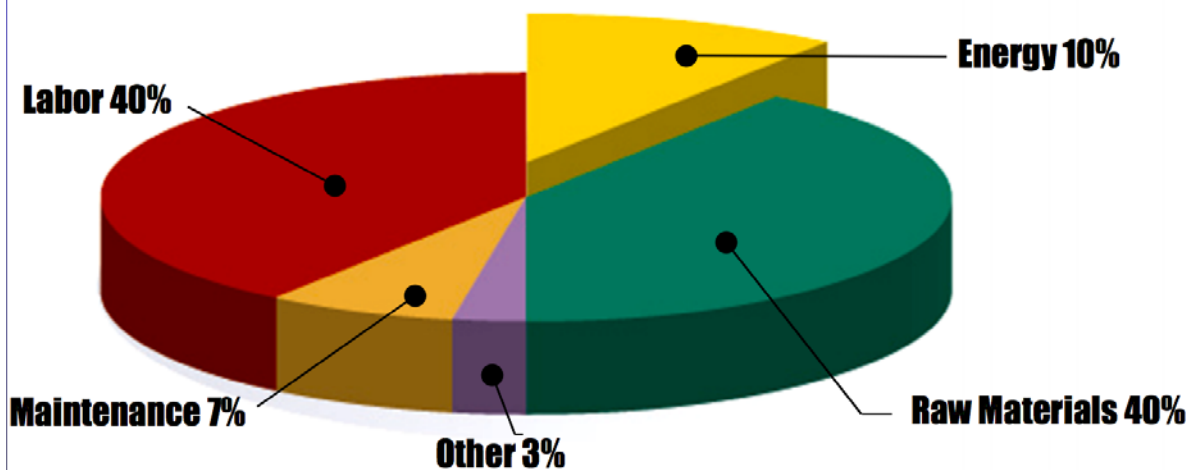


Figure 24: A Pie Chart Depicting the Operational Costs of a Foundry

In addition to grant applications and funding from nearby universities, the Forge has the potential to generate revenue from the following sources:

- Tuition programs by partnering with nearby universities, such as the University of Massachusetts, Amherst. Non-resident students pay up to \$15,000/semester, which could yield a high profit.
- Membership fees.
- Space rental.
- Partner agreements with nearby universities that can buy an option in the center.

Target Market:

Due to Orange's location and amenities, it can appeal to a wide variety of potential users:

- Colleges with undergraduate and graduate degrees in sculpture, with or without their own foundry.

- Colleges within driving distance committed to individualizing their fine arts programs according to student interests, which may have one or two students at a time interested in sculpture.
- Colleges in New England where students or faculty might want to offer a weekend program.
- Sculptors without foundry capacity or workspace for large projects.
- Students and adults who would be interested in a course or project involving sculpture but are not in a college program and are not practicing sculptors.
- Builders and contractors who might want pieces for their own projects.
- Architects who might want a relationship for commissioned pieces, assuming this consortium has many sculptors and collaborators for courses, lectures, demonstrations, consulting, exhibits, or/and consigned pieces.
- International sculptors who want to work in the United States but cannot locate full capacity, supported work space.

14 FUNDING OPPORTUNITIES

The town of Orange and 28 other communities in Franklin and Worcester Counties were recently designated an Economic Development District (EDD) by the Economic Development Administration (EDA), which will put the town on the radar of the EDA and will help it to gain funding for future projects. Following is list of a number of grants in which the town of Orange can apply for in order to fund the Arts Education Center that is being proposed.

Funding opportunities for the town of Orange include Federal and Massachusetts grants. The town of Orange has already applied for an NEA grant for \$600,000 (see Section 13). Other potential grants are offered by the Economic Development Administration (EDA), ArtPlace America, the Department of Conservation and Recreation, MassDevelopment, MassBusiness,

and the Federal Community Development Block Grants (CDBG). The town of Orange is eligible to apply to all of the following grants:

- The EDA's Regional Planning and Local Technical Services Grant has an award ceiling of \$300,000 and accepts applications on a rolling basis throughout the year.
- The NEA's Our Town Grant awards matching funds from \$25,000 to \$200,000 for arts engagement projects, cultural planning, and design projects. The latest deadline for this grant was September, 2015.
- The ArtPlace National Grants Program offers grants from \$50,000 to \$500,000 to communities where the arts play a central role in the communities planning and development strategies.
- Community Development Block Grants can come from two agencies. Local Governments can apply for funding directly from the Department of Housing and Urban Development, or, in Orange's case, they could also apply to the Massachusetts Executive Office of Housing and Economic Development (Mass HED). Mass HED's average award over the past seven years was \$741,000.
- The Massachusetts Cultural Council's Adams Art Program offers grants average \$27,000 to projects that aim to revitalize communities, create jobs, grow creative industries and increase engagement in cultural activities.
- The Department of Conservation and Recreation offers the Recreational Trails Program for local governments or non-profits, providing funding for up to \$100,000 towards motorized or non-motorized trails.
- The Massachusetts Brownfield Remediation Fund offers grants for local governments in economically distressed areas to assess brownfield properties for up to \$100,000, and up to \$500,000 to remediate. Projects that are in "priority" areas can gain up to \$2,000,000.

The Massachusetts Brownfields Program offers many more different ways to help fund brownfield sites including MassBusiness' Remediation Loans Program, Massachusetts Department of Revenue's Brownfields Tax Credit Program, as well as the Massachusetts Office of Business Development's Economic Development Incentive Program, which gives participating businesses tax incentives per the creation of full-time jobs.

Along with these grants, we look to attract anchor institutions to help fund the Arts Education Center, including the University of Massachusetts, Amherst, School of Humanity and Fine Arts, the UMass Arts Extension Service, Mass MOCA, and Greenfield Community College. In particular, there is the potential for the UMass Arts Extension Service to operate the center as part of their Arts Management Master's program.

15 RECOMMENDATIONS

In order for the Arts Education Center to be successful, its purpose and function must be diversified to appeal to a wide range of customers. Therefore, we are proposing for a range of operations to be associated with the center, including a museum, where works of art will be shown by local and regional artists, studio space, the foundry itself, classrooms, as well as live/work studio spaces for artists to work out of.



Figure 25: A Rendering of the Potential Rehab of the Barns Realty Trust Site as the Orange Arts Education Center

Additionally, the Arts Education Center would include a sculpture park, where the affiliated artists will be allowed to display their art on the property to the north and west of the Erving Paper Mill. A walking trail will go right through the sculpture park and head to a pedestrian bridge across the Millers River, which is being proposed to connect to downtown Orange.

While it may not be a major employer for the town of Orange, the Arts Education Center will increase the region's reputation and cachet, establishing the town as a tourist destination and arts hub, thereby triggering economic spillover effects for local businesses.

16 NEXT STEPS

Next Steps for the Center for Economic Development:

Next steps for this project are:

- Research the Holyoke High Speed Computer Center as a model for creating a consortium between universities, which would direct management and funding.
- Research the Kohler Facility in Wisconsin for the potential of an industrial connection with this project.
- Research economic spillover effects of arts-educational clusters on the surrounding community.
- Investigate the energy requirements for the Foundry and the potential for alternative fuel sources such as hydropower and biochar.
- Begin a community engagement strategy to generate support from local residents and other pertinent stakeholders.
- Identify additional sources of funding by targeting investors and regional educational institutions.
- Enact regulatory changes into the town of Orange's zoning bylaws to better attract developers.

17 CONCLUSIONS

In conclusion, for many cultural, economic, and political reasons there is evidence to support the establishment of a foundry and arts education complex in the North Quabbin, which would revitalize the town of Orange and neighboring communities. Although more research needs to be done, our initial assessment shows the potential for this project to fill an economic niche, and contribute to the vision for North Quabbin's future.

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