

# **The Library as a Refuge in the Storm**

Community Innovation Challenge Grant Final Report  
Memorial Hall Library  
Andover  
April 1, 2013



**TABLE OF CONTENTS**

TABLE OF CONTENTS..... 2

INTRODUCTORY LETTER..... 3

PARTNER COMMUNITIES..... 4

GOALS..... 4

IMPLEMENTATION PLAN..... 4

BUDGET..... 6

CHALLENGES AND SOLUTIONS..... 7

OUTCOMES..... 8

CONTACT INFORMATION..... 8

RESOURCES..... 9

## INTRODUCTORY LETTER

The storm that hit the region in October 2011 left most of the town of Andover without power for days. Our library, which did not lose power, became a refuge for people seeking heat, electricity, things to do, internet connectivity, and a place to meet. People also came to us to find out what restaurants, stores and gas stations were open, where regional shelters could be located, which churches were open, and so forth.

Our staff did an excellent job answering these types of questions, but when the first round of CIC grants was announced a few months later, our director saw an opportunity to make this kind of information more easily available and applied for funding to install two electronic bulletin boards that could be configured to display timely “disaster” related announcements and information as needed.

It was also hoped we could use these electronic bulletin boards as a focal point for discussions with other town departments that would result in the library becoming part of the town’s emergency response management team. This report describes the challenges and successes we experienced during the evolution of this project.

A handwritten signature in black ink that reads "Dean Baumeister". The signature is written in a cursive style with a horizontal line underlining the name.

Dean Baumeister  
Memorial Hall Library  
March 27, 2013

## **PARTNER COMMUNITIES**

Memorial Hall Library was the sole entity involved in the implementation of this grant. As a result of the grant, the library has become a part of a town emergency response team that previously had been the purview of other town departments.

## **GOALS**

The primary goal of this project was to purchase two interactive electronic bulletin boards, configure them to be able to display both emergency and non-emergency information, then deploy them to two different locations in the library.

A secondary goal was to have our library director meet with other town department heads and, using the bulletin boards as an example, investigate ways in which the library could become involved in the town's overall emergency response efforts.

## **IMPLEMENTATION PLAN**

The plan for implementing this project was straightforward:

1. Identify the types of information that should be displayed on the bulletin boards
2. Identify bulletin board requirements and capabilities – features, locations and installation requirements – and choose a vendor
3. Meet with town department heads to discuss the library's role in the town's emergency response system
4. Work with the digital signage vendor to configure the bulletin board system
5. Work with an electrician to bring power and data to the chosen locations
6. Work with a carpenter to build cabinetry to mount and frame the bulletin boards
7. Deploy the bulletin boards
8. Conduct an evaluation of the system

We determined that emergency information appropriate for display on the bulletin boards would include contact information for and, in some cases, information and announcements from, the following:

- Police and Fire departments

- Town departments and schools
- Utilities and providers of telephone and internet services
- Weather resources
- Traffic resources
- Relief agencies
- Supermarkets, hardware stores and pharmacies
- Tree and clean up services
- Public transportation
- Religious organizations
- Hospitals and veterinary hospitals
- Hotels
- Restaurants

Types of non-emergency information we wanted to display included announcements of library services, programs and events, as well as basic directory-style information to complement our building's physical signage. After looking at what different electronic signage vendors were offering, we further decided that we would like to include floor maps of the library.

When we approached vendors for quotes, we requested the following:

- At least two kiosks with large (approximately 42") commercial-grade touch screens and interactive interface
- Content creation/maintenance system accessible by multiple users via web interface
- Updateable floor maps of the library
- Support and training
- Vendor should have experience working with public libraries

The vendor that offered the best solution at the best price was Anode, Inc. Their digital signage product, called FireSign, seemed to meet all these requirements and had the potential to do more. They assigned us a project manager who, along with technical staff, assessed our needs, collected data from us, created floor maps, provided web-based training to our staff, and answered all our questions via phone, email, or their web based help desk system.

The library director met with other town department heads to talk about the bulletin boards and their potential use as a means of communicating information that the town might want to convey during times of emergency. This led to discussions about how the library could play a larger role in the town's overall emergency response efforts.

After sending Anode photos, videos, and rough floor maps of the library, they helped us choose locations for the bulletin boards – one located near each public entrance in an easy to see area but out of the way of foot traffic. With this knowledge, we were prepared to hire an electrical contractor to bring power and data to those locations. Thanks to the library director's discussions

with other department heads, however, the town decided to have its own Plant & Facilities department do the work, thereby saving roughly \$4,000.

Once the locations for the bulletin boards were known, Anode showed us options for mounting them. It became clear that standard mounting options (a floor stand for one and a wall mount for the other) would be functional and attractive enough for our needs, and that the additional cabinetry or framing we had anticipated earlier would not be necessary.

As Firesign configuration and workflow procedures were being finalized, and while we waited for the electrical work to get done, the library director continued to meet with town department heads and began participating regularly in meetings and conference calls held by the town's emergency response team.

The final steps in the implementation plan were to deploy the electronic bulletin boards and, after several weeks of use – plus at least one instance of being used to display emergency related information – conduct an evaluation of the system.

## **BUDGET**

When we applied for the grant, we obtained informal quotes from several digital signage vendors, took one we thought was representative of the others in terms of software, service and cost, then added what we anticipated would be the costs for wiring and cabinetry. The original budget estimate came out to be as follows:

<b>Budget Item</b>	<b>Amount</b>
System software	\$999
Support/ training	\$599
Touchscreen software	\$2,999
Application design	\$5,000
Equipment	\$9,194
Kiosk/ cabinetry	\$6,000
Power/ data wiring	\$4,000
Hosting fee	\$1,176
<b>Total budget</b>	<b>\$29,967</b>

Many adjustments were made once the project got underway. After the grant was awarded and a vendor was chosen, we were able to have in-depth discussions about our requirements and how they met up with what the vendor was able to provide. The vendor was able to supply a floor stand and wall mounting hardware for the electronic bulletin boards they were providing, which obviated the need for the cabinetry and carpenter work that we had anticipated earlier. Further, the vendor determined that, with minimal adjustment to the original quote, they could provide

not just two electronic bulletin boards that were interactive, but a third, non-interactive one as well.

We also learned that the Town was willing to have an electrician from its Plant & Facilities department handle the task of running power and data to the two locations we had in mind for the bulletin boards, thus saving the money we thought we would have to be spent toward electrical contractors.

As costs for work related to the electronic bulletin boards were finalized, we realized that enough grant money would be left over to add a projector and appropriate audio equipment to each of the library's two main public meeting spaces, which would allow us to display broadcast TV to large audiences. This, we felt, would be immensely helpful in getting important news and information out to people who, due to storms or other emergencies, have lost their power at home and have come to the library to take refuge.

The amended budget, then, was as follows:

<b>Budget Item</b>	<b>Amount</b>
Support/ training	\$599
System software	\$999
Touchscreen software	\$2,999
Application design	\$6,000
Equipment	\$11,091
Kiosk/ cabinetry	0
Power/ data wiring	0
Hosting fee	\$1,404
Shipping for kiosk hardware	\$932
Projectors and related hardware for Displaying broadcast TV	\$4,836
Projector installation	\$1,107
System software	\$999
<b>Total</b>	<b>\$29,967</b>

## **CHALLENGES AND SOLUTIONS**

We faced two challenges during the project:

- numerous delays
- a budget overage

The delays occurred throughout the project's implementation and included the following:

- Identifying, getting quotes from, and choosing a digital signage vendor
- Floor map design required much more library staff time than expected

- Electrical work – originally anticipated to finish by the end of June – did not begin until October and was not completed until December.
- Firesign bugs, including one that caused the bulletin boards to display only a black screen until touched, and another which caused events to show incorrect times. These occurred sequentially and many took weeks to fix.

The second “challenge” was that we overestimated the cost of the project by almost \$6,000. This was because we originally anticipated having to pay that amount for custom cabinetry and framing work to mount the displays. But, as stated elsewhere, in working with the vendor, we discovered that a floor stand and standard wall mount were sufficient for our needs.

The first challenge could be handled only with patience and occasional gentle nagging through follow-up phone calls and emails. The second was solved by amending the budget to include audio/visual equipment that could be used to show information that, like the bulletin boards, would be useful during emergencies: broadcast television, displayed through projectors in our library’s public meeting spaces. Broadcast television projected on large screens in public meeting spaces could, for example, convey tornado watch/warning information from news stations.

## **OUTCOMES**

As the bulletin boards are only now being deployed (one was put out two weeks ago, another three days ago, a third has yet to be put up), and work for installing the digital projectors has begun only recently, we have not been able to do a system evaluation, nor have we been able to collect data on how the general population views the library as a source of critical information during emergencies.

It has become clear, however, that the town now recognizes the library as an important resource in emergencies. The library director now regularly attends meetings and conference calls held by the town’s emergency response team, the library is consulted on building closure decisions, every effort is made to keep the library open in snow and other emergencies, and the library has been asked to send out information on our email alerts lists, Facebook, Twitter feed, and web page. Thus, even while this project’s primary goal of implementing hardware is still being worked on, it has allowed us to fully achieve our secondary yet larger and more important goal of becoming an integral part of the town’s emergency preparedness plan.

## **CONTACT INFORMATION**

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## **RESOURCES**

[Website for Anode, Inc.](#) |