

# Community Group Presentation Support Slides

Developed as part of the:



**IAAI/USFA Abandoned  
Building Project**



This presentation is intended to support presentations regarding the potential hazards and issues that vacant and abandoned buildings pose to community groups. Additional information related to the presentation is found in the project background package and lesson plan that accompanies the presentation.

**Vacant and Abandoned Buildings in  
Our Communities**

***What You Can Do About Them***



**IAAI/USFA Abandoned  
Building Project**



### Vacant or Abandoned?

#### ➤ Vacant buildings

- ✓ Owner is known
- ✓ Taxes are current
- ✓ Building is “unoccupied”



#### ➤ Abandoned buildings

- ✓ No viable owner
- ✓ Taxes not paid
- ✓ Building is not legally occupied



The terms “vacant” and “abandoned” are often used interchangeably when talking about these buildings. There is, however, a subtle difference in the terms. Black’s Law Dictionary defines **vacant** as “empty; unoccupied”. The word **abandon** is defined as “to desert, surrender, forsake or cede. To relinquish or give up with intent of never again resuming one’s right or interest.” For buildings, the difference between vacant and abandoned is primarily related to the availability of an owner. Unoccupied buildings where there is a viable owner, i.e. one that is interested in the property and easily contacted, are considered vacant. Where there is no viable owner or an absentee landlord, the property is generally considered abandoned. Unoccupied properties that are secure and well maintained do not pose the threat to public safety that properties that are unoccupied and open to unauthorized access do. Where there is no viable owner, the property is considered abandoned.

## Target Properties

- **Secure and well maintained properties are not the problem**
- **Problem properties**
  - ✓ Vacant
  - ✓ No viable owner
  - ✓ Unsecured
  - ✓ Accessible



Properties that are secure and well maintained even though they are unoccupied are not the problem. Communities should monitor all vacant properties, but those that have no viable owner, and are unsecured and accessible to unauthorized entry are the properties that require immediate attention to prevent fires and other criminal activity.

## Vacant Properties



**It is estimated that 18% of urban structures in the United States are unused**

**The ISO estimates that there are more than 21000 idle properties of over 15000 square feet in the United States**



## Vacant and Abandoned Buildings – Community Presentation

### The Problem

- **Thousands of fires annually**
- **Fire Fighters are more likely to be injured fighting fires in vacant properties than any other property type**
  - ✓ **More than 6000 fire fighters injuries every year**
  - ✓ **From 1990 to 1999 - 23 fire fighters died while operating at fires in vacant/idle properties**



Every fire investigator knows that vacant or abandoned buildings are a significant public safety issue. Vacant or abandoned structures are unsightly, attract criminal activity, and are a threat to public safety where ever they exist. The National Fire Protection Association (NFPA) estimates that more than 6000 firefighters are injured while fighting fires in these properties every year. NFPA statistics show that more fire fighters are injured while operating at fires involving vacant or abandoned properties than in any other property classification. The loss of six fire fighters operating in a vacant property in Worcester, Massachusetts, in December of 1999 was a tragic example of the hazards these buildings pose in communities.

## Vacant and Abandoned Buildings – Community Presentation

### Greyfields – An Emerging Problem

- Vacant or under utilized commercial structures
- Former Big Box type stores that are left vacant when the retailer moves to a larger or more modern property
- Typically are protected by sprinklers – that may not be maintained during vacancy
- Large unused parking area
- Large loading dock area that is not visible from street



Vacant BIG BOX store properties – Greyfields - are beginning to appear in many communities, including rural or small towns with volunteer fire departments where there has not been a vacant or abandoned building problem before.

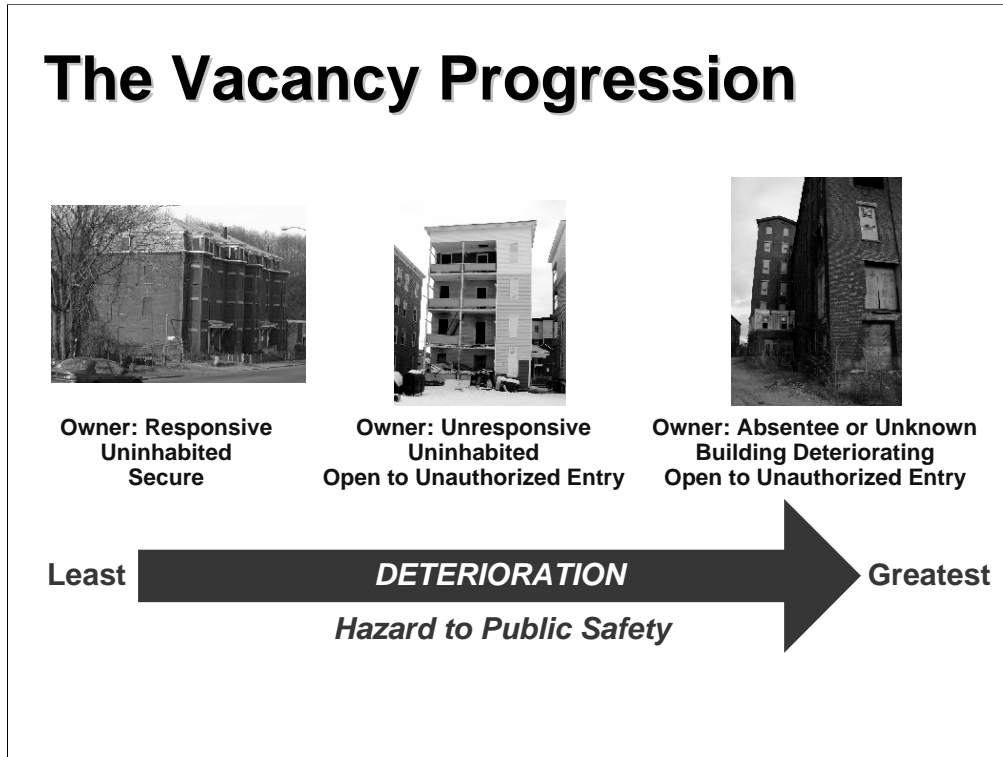
## **Building Security is Essential**

- **Of the thousands of fires in vacant structures every year**
  - ✓ **Most are of incendiary origin**
  - ✓ **Many are caused by children playing with matches**





## Vacant and Abandoned Buildings – Community Presentation



Discuss the progression shown on this slide. Point out that deterioration of buildings results from age, vandalism, and being open to the weather. The more deterioration, the more dangerous and unsightly the building becomes. This condition is made worse if the building is also occupied or used by unauthorized occupants to provide shelter, to hide and play in, or to conduct criminal activity.

## The "Broken Windows" Theory of Social Disorder



***From one broken window, you  
can lose a street***

George Kelling and Catherine Coles describe the relationship between abandonment and crime as the “Broken Windows theory of social disorder” in their publication *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*<sup>1</sup>. The following quote is from the book Forward written by James Wilson

“If a factory or office window is broken, passersby observing it will conclude that no one cares or no one is in charge. In time, a few will begin throwing rocks to break more windows. Soon all the windows will be broken, and now passersby will think that, not only is no one in charge of the building, no one is in charge of the street on which it faces. Only the young, the criminal, or the foolhardy have any business on an unprotected avenue, and so more and more citizens will abandon the street to those they assume prowl it. Small disorders lead to larger and larger ones, and perhaps even to crime.”

<sup>1</sup> Kelling, George L. and Catherine M. Coles. *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*. New York: Touchstone, 1996.

### The Impact on the Community

- **Crime**
- **Safety**
- **Community image**

**Abandonment is a contagious phenomenon**



“Abandonment of property is the most striking indication of neighborhood decline. Large-scale abandonment threatens the stability of neighborhoods and undermines the value of investments made by other property owners. The literature indicates that abandonment and decline of property can be considered as a contagious phenomenon. Fire is intertwined with abandonment as both a cause and an undesired side effect.

Abandonment usually signals the end of a building’s productive life. Real estate market conditions, difficulty in obtaining financing for renovation or repair, withdrawal of fire insurance, and declining economic fortunes of tenants all contribute to abandonment. In declining areas, the use value of a building will frequently exceed its market value. Any damage to the building sufficient to vacate it can lead to abandonment by the owner.”<sup>1</sup>

The issues that Charles Jennings describes in the quote above are those that resulted in significant fire problems in cities such as Detroit; Houston; New Haven, Connecticut; Utica, New York; and Lawrence, Massachusetts. For commercial or industrial properties, the issue may be that the building has reached the end of its useful lifecycle and that it would cost more than the building is worth to improve it for continued use. Many industrial buildings in the Northeast fit this category. Environmental pollution and the high cost of mitigation are also factors in the abandonment of commercial properties. Whatever the cause, these rapidly deteriorating buildings in communities become havens for the homeless and vandals as well as magnets for criminal activity.

<sup>1</sup> Urban Residential Fires: An Empirical Analysis of Building Stock and Socioeconomic Characteristics for Memphis, Tennessee. Dissertation by Charles R. Jennings, Cornell University, August 1996.

### Hazards to Fire Fighters



This is a photo from the NIOSH report on the Worcester Cold Storage building fire that claimed the lives of 6 fire fighters in Worcester, Massachusetts, in December of 1999. This fire heightened the awareness of the nation to the problems that vacant and abandoned buildings pose to those responsible for protecting lives and property.

### Structural Collapse



- **Weakened structural components**
  - ✓ **Weather**
  - ✓ **Age**
- **Exposed structural members**

Buildings that are deteriorating have a significant potential for structural collapse very early in the progress of a fire in, or even near them. Structural members that are intended to support the weight of the building may be weakened and not provide the long term support under fire conditions they would normally provide.

## Vacant and Abandoned Buildings – Community Presentation



Combustible interior finish was a significant factor in the Worcester Cold Storage fire – Photos on top right of slide are from the NIOSH report.

Fuel packages including trash and bedding such as shown in the other photos on this slide will contribute to the growth and development of a fire. The mattress in the stairway provides enough fuel to generate a significant fire in the stairway – a location that fire fighters would not expect to find this type of fuel in occupied buildings.

### Community Image and Blight

- Properties vacant or in disrepair
- Unsightly and easily ignited trash accumulations
- Rats and vermin
- **RESULT**
  - ✓ Declining property values
  - ✓ Declining development



Blight – Deteriorating conditions of property have a significant impact on property value. Vacant and abandoned buildings increase this cycle of deterioration.

### Open Shafts or Pits

- **Stairs – removed or damaged**
- **Removal of equipment**
- **Urban mining**
- **Serious fall hazard when smoke is present**



Open shafts and pits are one of the most dangerous hazards in vacant/abandoned buildings. These openings may be the result of the removal of equipment or acts of vandalism. Urban mining is the term used to describe stripping of installed equipment, piping, and wiring for sale as scrap. This act creates numerous holes that can become mantraps or allow fire to travel rapidly through the structure.



### Exposure Fires

- **Hazard increases when adjacent buildings are uninhabited**
  - ✓ Delays in alarm = Larger fires
  - ✓ Greater potential for spread to other buildings



Fires in vacant/abandoned building pose a significant threat to adjacent structures since there is typically a delay in notification of the fire department that allows the fire to develop and spread. Where there are clusters of vacant properties a fire can involve several buildings before it is reported.

### Dealing with the Problem

- **Interdepartmental cooperation**
- **Determine the magnitude of the problem**
- **Identify properties with a potential for abandonment**
- **Evaluate and mark vacant and abandoned structures**
- **Aggressive code enforcement to prevent deterioration**



This is an overview slide listing areas that need to be addressed to adequately deal with the vacant/abandoned building problem in any community. Each point will be addressed in the following slides.

### Short Term Solutions

- Provide building security
- Surveillance to monitor security
- Remove combustibles
  - ✓ Interior
  - ✓ Exterior



In the short term the most important action a community can take is to deny unauthorized access into vacant or abandoned buildings. This can be done passively by properly boarding the buildings up, or actively through aggressive surveillance and patrol.

To prevent fires, all available combustibles in or around the buildings should be removed. Trash accumulations are easy targets for vandals to ignite.

### Long Term Solutions

➤ Determine candidates for

- ✓ Reuse
- ✓ Demolition



In the long term, communities have basically two choices for dealing with these buildings – reuse or demolition.

### **Interdepartmental Cooperation**

- **City Manager/Mayor**
- **Community Development**
- **City Solicitor**
- **Building Inspector**
- **Fire Department**
- **Police Department**
- **Assessors**
- **Treasurer**



***Without the involvement of these departments or individuals, at a minimum, it will be difficult to deal with the problem***

Vacant and abandoned buildings can only be controlled if there is significant cooperation among the municipal departments in a community. Without leadership and support from the top – the mayor/ city manager or equivalent – the problem will probably not be resolved.

The groups listed above are examples of the departments that have jurisdiction and data regarding vacant or abandoned buildings.

### **Do we have a problem?**

- **Studies show that many communities do not know the number of vacant or abandoned properties within their jurisdiction**
- **Critical information may not be available centrally**
- **The “paper chase” is time consuming and may prove to be very difficult**

The **FIRST** step in addressing the issue in any community is to have an accurate listing of the vacant/abandoned building in the community. In many communities this information is not compiled in any usable format or location.

The information may not be compiled into a usable format and generating lists can be time consuming because the data can be located in several different locations. But, it has to be done if improvements in the community are to be made.

### Data Collection

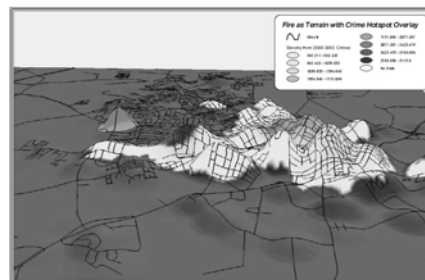
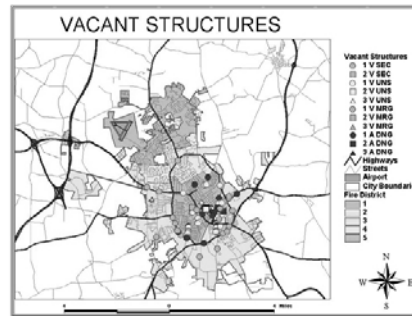
- **Determine the magnitude of the problem**
  - ✓ Use early warning signs to target properties before they become empty
  - ✓ Identify owners early in the vacancy progression
  - ✓ Maintain an accurate list of vacant and abandoned properties in the community
- **Organize data so that is accessible to all involved agencies**

***How many vacant or abandoned buildings are in our community?***

Good collection and management of available data is an important activity in every community. Early identification of vacant properties can help in the identification of an owner. With a known owner, cost for security and demolition can then be assessed with some probability of payment.

## Tracking the Problem

- Many communities are using GIS technology
- Allows for tracking of individual properties
- Helps to predict trends and potential problem areas in the community
- Allow the user to overlay data from multiple agencies on one map



GIS technology is an outstanding tool in the fight against vacant and abandoned buildings. The IAAI Tool Box contains additional information on how GIS can be used. The maps shown on this slide was produced by the City of Wilson NC as part of a comprehensive GIS implementation project.



### Early Warning Signs



- **Previous fires**
- **A history of back taxes**
- **Unabated housing code violations**
- **Unreleased liens and attachments**
- **Building owners with a history of abandoning other properties**
- **Decreasing utility usage**
- **Increasing vacancy in multi-tenant properties**

Communities must know which buildings in their jurisdiction are vacant or abandoned to take action. A more proactive approach is to begin to track properties that are at-risk of becoming vacant while a viable owner is still known. One such program was initiated in the early 1980's by the city of New Haven, Connecticut. Using funds from public and private grants, the Arson Warning and Prevention Strategy (AWAPS) was developed. This program allowed the community to identify properties that were at risk of becoming vacant and intervene before abandonment.<sup>1</sup> The risk factors that triggered action in New Haven were

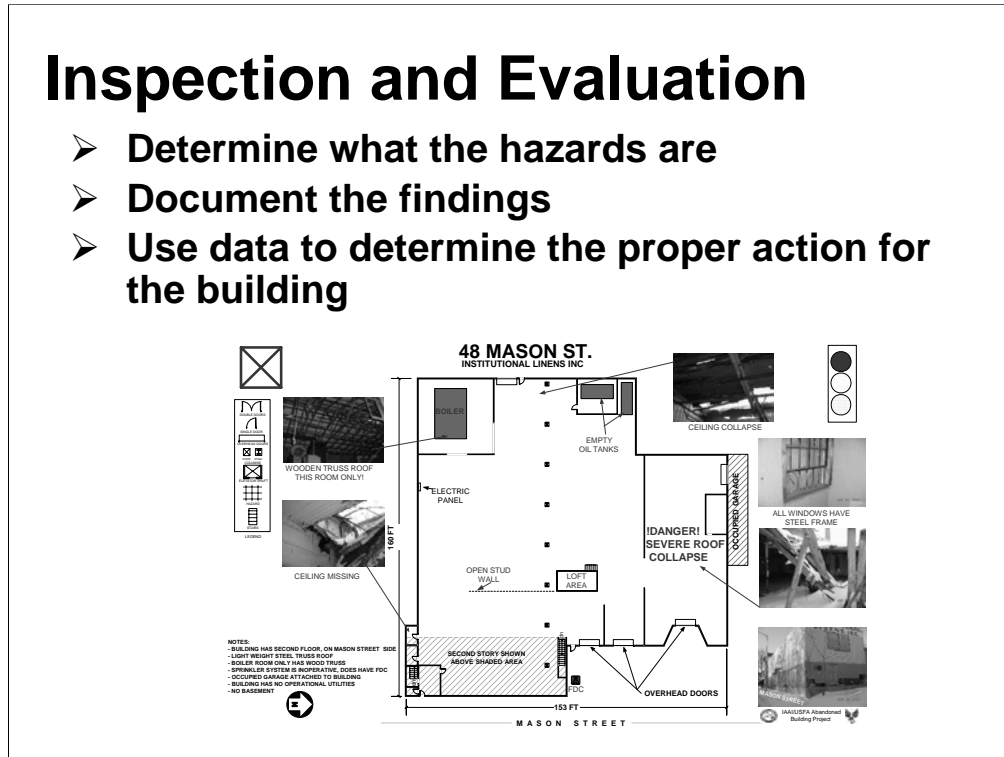
- A history of back taxes
- Previous structural fires
- Unabated housing code violations
- Unreleased liens and attachments

At-risk properties were then targeted for action while the owner was still available and the property occupied. This type of action reduces the cost to the community and places the responsibility for rehabilitation of the property or proper security on the owner early in the cycle of deterioration.

<sup>1</sup> “New Haven’s AWPS program helps authorities pinpoint potential hot spots”, Firehouse, August 1980.

## Inspection and Evaluation

- Determine what the hazards are
- Document the findings
- Use data to determine the proper action for the building



Once a building becomes vacant it should be evaluated to identify potential hazards and to provide emergency responders with vital information they can use in the event of fire. The evaluation data can also be used in the decision making process when limited funds must be allocated to address the most significant problems.

Lack of information about the Worcester Cold Storage building was a factor in the loss of the six fire fighters.

### Identification Process

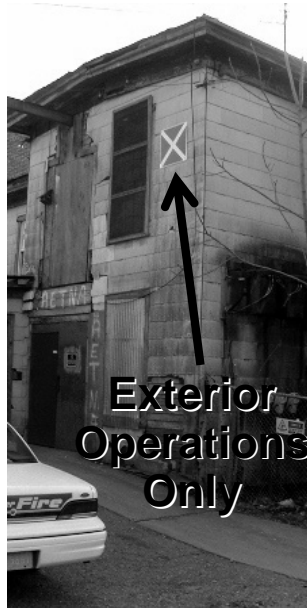
- **Used to alert fire fighters of the potential hazards in a vacant/abandoned building**
- **Makes public aware of problem properties**
- **Allows for increased surveillance**



Building marking is one way that many communities identify that hazards exist in a structure. The marking process is coupled with the inspection and evaluation. This process has been used successfully in many large cities such as New York and Boston. As a result of the Worcester fire, many other communities have implemented similar programs.

## Vacant and Abandoned Buildings – Community Presentation

### Marking Buildings



- Severe structural or interior deficiencies
- Operations should be conducted from outside except for life safety
- If interior operations are required:
  - ✓ Approved by Incident Commander
  - ✓ Tactics modified
  - ✓ Examined before units are committed
- Time of any interior operations must be limited

The X indicates that the building is a significant hazard and that, unless there is a known life safety hazard, operations should be conducted from the exterior.

### Securing Buildings

- **The objective is to prevent unauthorized access**
- **Must be done well**
- **Slows down deterioration of the structure**
- **Security = Fire Prevention**



It is critical that unauthorized access to vacant and abandoned building is prevented either by proper security or high visibility surveillance. Where physical security is required it must be done well to be effective. Once secured the building must be patrolled with some frequency to make sure it remains secure.

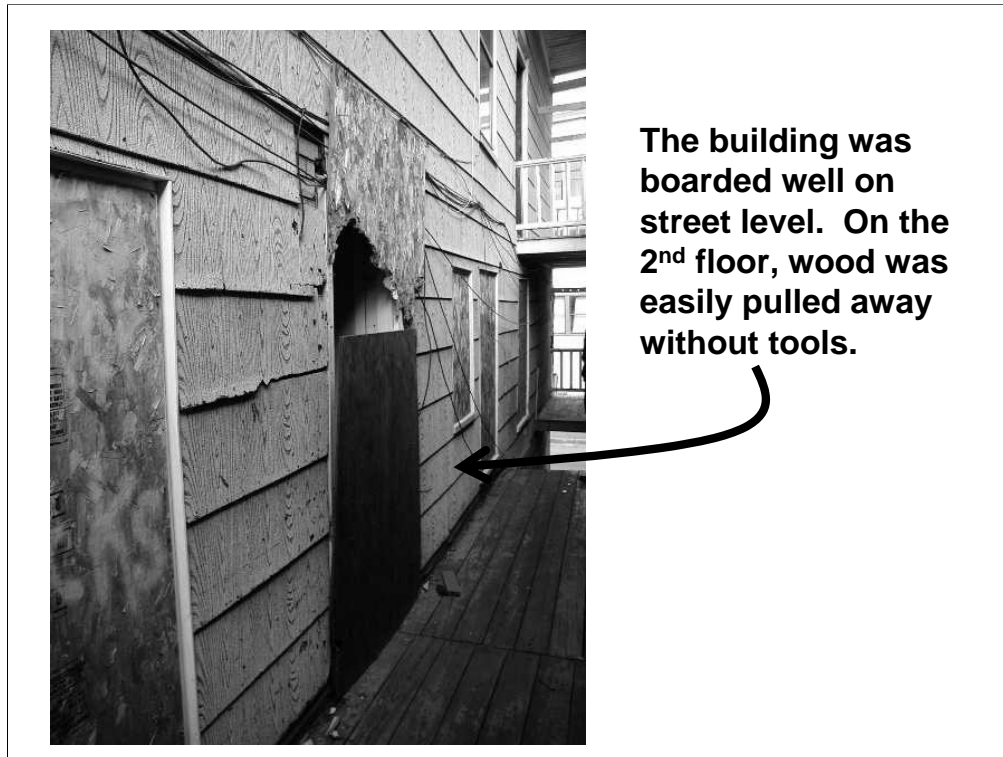
An added benefit to boarding up an entire structure, or “mothballing” it, is that deterioration due to weather exposure is also reduced.

## Particle Board Doesn't Work!



This slide shows the importance of doing the job well with the proper materials. Particle board is ineffective as a security measure.

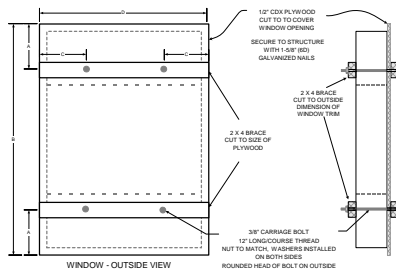
## Vacant and Abandoned Buildings – Community Presentation



This slide shows more problems found with security. Problems like this one demonstrate the need for regular patrol to determine the integrity of the security measures. When problem are found, they must be repaired.

# Vacant and Abandoned Buildings – Community Presentation

## HUD Secure Board-Up



WINDOW - OUTSIDE VIEW

- NOTES:
1. FOR DOUBLE AND TRIPLE GLAZED WINDOWS, GLAZING TO CENTER OF GLAZING PANELS. BOLTS THROUGH OPENINGS AT TOP AND BOTTOM.
  2. STORM WINDOWS SHOULD BE REMOVED AND STORED INSIDE STRUCTURE.
  3. OUTSIDE TRIMMAY HAVE TO BE REMOVED TO ACCOMMODATE A FLUSH AND TIGHT FIT.
  4. TIGHTEN NUTS FROM INSIDE ENOUGH TO SLIGHTLY COMPRESS 2X4 BRACE.
  5. BRACE LOCATIONS: A = 1/8" B = 1/8" SEE DETAIL FOR DIMENSIONS.
  6. LOCATION OF BOLT HEADS: C = 1/8" SEE DETAIL FOR DIMENSIONS.



The HUD secure Board-up procedure is a very effective method of preventing unauthorized access to buildings

While there are many methods available for securing properties, the HUS and USFA National Arson Prevention Initiative Board Up system is one of the most effective. Done correctly and coupled with a surveillance program, buildings secured using this method are very difficult to enter. The system is also resistant to deterioration due to weather or the elements. Detailed instructions are provide on the IAAI Tool Box CD.



## Vacant and Abandoned Buildings – Community Presentation

### Reuse

- **If the structure is viable, reuse or rehabilitation is the best alternative**
  - ✓ Homesteading
  - ✓ Forgiveness of back taxes
- **Helps to put the property back into productive use**
- **Reduces blight and the associated crime**
- **A source of affordable housing or commercial space**
- **Preserves historical buildings**



If the structure is viable, it may be a candidate for rehabilitation and sale. Other considerations for rehabilitation might be the historical significance of the structure. To facilitate this process, some communities publish lists of vacant properties that are available for reuse or rehabilitation<sup>1</sup>. Organizations such as Habitat for Humanity, church or civic groups, or private developers have stepped forward in communities to rehabilitate residential properties. In Lewiston, Maine, the community used a combination of federal, local, and private funds to rehabilitate a portion of a vacant shoe mill in the center of the community. This property now has a variety of tenants and is a productive, viable property in a prime location within the community. The reuse of old factories for residential, commercial, or manufacturing occupancies is a popular trend in many old industrial communities. In most cases these efforts are the result of a public/private partnership.

The building shown on this slide is the old Wilson NC High School. The first photo was taken in 2001 when the property was empty and open to unauthorized entry and the weather. Shortly after the photo was taken a public/private partnership was able to secure the funds to rehabilitate the property into much needed residential housing.

<sup>1</sup>“Vacant Buildings – Turning a problem into an opportunity”,  
[http://www.ci.jersey-city.nj.us/vacant\\_buildings/vacant\\_buildings.html](http://www.ci.jersey-city.nj.us/vacant_buildings/vacant_buildings.html)

## Vacant and Abandoned Buildings – Community Presentation

### **Demolition**

**Removal of obsolete  
or dangerous  
properties**



#### **Pros**

- ✓ **A permanent solution to problem buildings**
- ✓ **Allows for new development**

#### **Cons**

- ✓ **Can be costly**
- ✓ **May have negative impact on neighborhood**
- ✓ **Reduces affordable housing stock**

Demolition of problem properties is a permanent solution to the problem. There are, however, drawbacks as discussed on the slide. Review the pros and cons of demolition and discuss any others that the group might identify.

### **Funding Sources**

- **The property owner**
- **Federal Programs**
  - ✓ **CDBG program – HUD**
  - ✓ **Brownfield Loans – EPA**
- **State development programs**
- **Local tax dollars**
- **Private enterprise**

***Public/private partnerships  
tend to be the most  
successful***

Dealing with vacant and abandoned buildings in communities is a time consuming and costly undertaking. To be effective, a community must address the issue from several perspectives so that they are identified, evaluated, secured, and finally demolished or rehabilitated. To accomplish this requires cooperation between governmental departments, the public, and, in many cases, private developers. Where a cooperative effort is not the case, the problem of vacant and abandoned buildings cannot be adequately addressed, and the community will be faced with the significant hazards that these properties pose to the safety of the public and fire fighters.

### **What can you do?**

- **Support anti-blight ordinances in your community**
- **Report at-risk or vacant properties**
- **Report signs of unauthorized entry into vacant properties**
- **Encourage political leadership to address vacant/abandoned buildings in your community**

Discuss what the participants can do to help the community. This may be the support of codes and ordinances adopted to address the issues, reporting at risk properties and seeking the support of the community leadership when it is necessary to expend public funds to mitigate problem structures.