Vacant and Abandoned Buildings – Community Leader Program

Vacant & Abandoned Buildings
What Communities Can Do About Them

IAAI/USFA Abandoned Building Project

Support slides for Community leader presentation. This program is designed to be a brief introduction of the issues for public officials.
The "Broken Windows" Theory of Social Disorder

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.

George Kelling
James Wilson

Atlantic Monthly Magazine
1982
This slide discusses the difference between a vacant and an abandoned building. Usually it is a viable owner. The important fact is that if the building is identified early in the process of becoming unoccupied, an owner may be identified and held responsible for the maintenance of the property. When a property is abandoned, it almost always falls on the community to maintain and secure.
The Impact on the Community

- Community image
- Crime
- Public Safety

Abandonment is a contagious phenomenon

This slide introduces the initial portion of the program – Impact. The next several slides describe the impact that vacant and abandoned buildings have on the community. It is important to point out that vacant/abandoned properties are very easy to ignore but that the problem is very contagious when community leaders choose this route.

“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.”

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.

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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.
Crime

“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.”

George Kelling and James Wilson
Atlantic Monthly Magazine, 1982

The Atlantic Monthly article and the subsequent book *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities*, by Kelling and Catherine Coles is one of the works that is commonly used in the justification of community policing efforts in a community.
The loss of six firefighters in Worcester, Massachusetts, in December, 1999, tragically showed the hazards vacant and abandoned building pose to the safety of the public and emergency responders. The next slide gives some statistics regarding this hazard.
Public Safety

- Thousands of fires annually
- Civilian Injuries and deaths
- Firefighters are more likely to be injured fighting fires in vacant properties than any other property type
  - More than 6000 firefighters injuries every year
  - From 1990 to 1999 - 23 firefighters died while operating at fires in vacant/idle properties
Target Properties

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

The properties that are critical to address are those that are vacant/abandoned and open to, or potentially open to, unauthorized access. These properties deteriorate very rapidly and represent the most significant threat to public safety.
How Many Are There?

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

The ISO estimates that there are more than 21,000 idle properties of over 15,000 square feet in the United States.

These numbers are low for the reasons discussed earlier – Most communities do not know exactly what the problem is in their jurisdiction.

Ask the participants to think of the structures that are empty in the community or within the portion of the community that they represent. Then ask if there is an official listing of those structures and what condition the buildings are in?
Community Problem

- Abandoned buildings almost always become the problem of the community
- They are public safety hazards
- They require tax dollars to mitigate
- They are easy to ignore

One of the major problems that communities face is that, when a building is abandoned, the responsibility for dealing with them falls to the taxpayer. In many communities the buildings are ignored or forgotten. This inaction usually makes the problem worse. If buildings are left unattended, they deteriorate rapidly and become even more costly to deal with in the long run. If there is any intention of reusing or rehabilitating a structure, it must be secured very early in the vacancy process or it will deteriorate to the point that it will no longer be viable. When this occurs, it detracts from the image of the community and becomes a potential hazard.
How serious is the 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” to identify owners is time consuming and may prove to be very difficult if not impossible

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.

This process is one that must be ongoing, since the problem is a dynamic one and is constantly changing.

For the maintenance of useable data to be effective, the monitoring of the vacant/abandoned building list should be assigned to a department or specific official in the community. Data regarding the properties must then be made available to departments that have an interest or authority to act. Computer databases that are available to multiple departments or users can be very helpful in the information sharing effort.

Some communities use GIS capabilities to organize the data and provide graphical output for use by decision makers and officials with a duty to act.
This slide depicts the vacancy progression - The longer a building is unoccupied and not secured, the more of a hazard to public safety it represents.
Abandonment & Fire

*Fire and abandonment are interrelated*

- Fire may cause a property to become abandoned
- Abandoned buildings are frequent targets of arson

Studies of abandonment show that there is a high correlation between fire and abandonment. Fire may be the cause of the building becoming vacant. Conversely, abandoned buildings are prime targets for intentionally set fires. As the Worcester fire demonstrated, all of the fires may not be intentional, they may result from homeless occupants or children playing.

Additionally, as buildings become vacant, the adjacent building are more at risk of becoming unoccupied. As Jennings states in his thesis, “abandonment is a contagious problem”.
The Hazards

Vacant and abandoned buildings are inherently more dangerous than occupied structures

- Deterioration due to exposure to elements and vandalism
- Potential for unexpected collapse
- Rapid fire development
- Open shafts and pits
- May expose other buildings if they burn

This slide introduces the next topic of discussion in the program – The hazards presented by these buildings. Because of the nature of these structures these hazards are of particular interest to the firefighters who must respond to the fires in them.
Structural Collapse

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

Structures that are weakened by vandalism, the removal of equipment or exposure to the elements are likely to collapse without warning. Under fire conditions the buildings may fail very rapidly as already weakened structural elements are consumed.
Fires in vacant or abandoned buildings may grow and develop in unusual ways due to heavy fuel loads in the building, exposed structural components, voids created by the removal of equipment and building systems, and the elements and vandalism.
Open shafts, pits and damaged stairways create hazards to anyone entering the building. These openings will also allow the fire to travel rapidly to other parts of the building.

The fall hazard is a specific danger to firefighters if they enter the structure under fire conditions where visibility is limited.

The fall hazard to unauthorized occupants also puts public safety responders at risk if they are called to rescue someone in this already hazardous structure who has been trapped or injured.
**Exposure Fires**

- Hazard increases when exposures are also uninhabited
- Increases the deterioration of the neighborhood

Fires in vacant structures may burn for some time without being discovered. This increases the potential that the fire will extend to other structures before firefighters can control it. Where numerous structures are abandoned and unsecured, this potential increases dramatically.
FIXING BROKEN WINDOWS

“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.”

George Kelling and James Wilson
Atlantic Monthly Magazine, 1982

The quote from Kelling and Wilson is used to introduce the next topic – Mitigation or dealing with the problem. The point here is if we fix the broken windows we slow down or stop the cycle.
Dealing with the Problem

- Develop interdepartmental cooperation
- Increase public awareness
- Determine the magnitude of the problem
- Identify properties with a potential for abandonment
- Evaluate and mark vacant and abandoned structures
- Enforce codes aggressively 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.
Abandoned buildings are a community issue and the interaction between appointed and elected officials and various departments is a must if the problem is to be addressed properly.
Can You Act?

Does the community have the authority to regulate vacant and abandoned buildings?

- Building Codes
- Fire Codes
- Anti-blight ordinances

What codes or ordinances are needed to properly regulate hazardous structures in your community?

To deal with the problem the community must have the authority to act and require property owners to take responsibility.
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Vacant Building Ordinance

- **Key elements of an ordinance**
  - Criteria defining proper security
  - Requirements for the removal of combustibles and hazardous waste
  - An inspection/evaluation process
  - Requirements for posting and marking buildings
  - Requirements regarding the maintenance of existing fire protection systems
- **Define the responsibility of the owner**
- **Define enforcement process and fines for noncompliance**
- **Posting of a bond by the owner**

Most building and fire codes allow the code official to require that hazardous buildings be secured or razed. These codes, however, do not provide specific criteria as to just what proper security is. Without these details in the code or local ordinance, the building owner can use any method he pleases to conform with an order.

A sample Anti-Blight Ordinance that deals with vacant structures can be found on the interFIRE VR at [http://www.interfire.org](http://www.interfire.org). Another example of a security ordinance is that of the City of Chicago, it can be viewed at [http://www.cityofchicago.org](http://www.cityofchicago.org).
Make the public aware of the issues and work to get support for community initiatives including using tax funds for the mitigation of hazardous structures. Awareness efforts might include

• Inviting the media to fire department training classes on the topic
• Taking reporters on tours of hazardous structures
• Inviting the media to observe a board-up of a structure that has a past history of criminal activity or fire.
• Providing speakers for citizen group talks.
Training of fire department and other community personnel is an important element in dealing with vacant and abandoned buildings.

Training in building evaluation demonstrates exactly what the issues are and helps to drive home the inherent hazards of these structures.

Training in proper security allows fire and building officials to understand the issues related to properly boarding-up properties and allows them to communicate the process and objectives to property owners and contractors involved in the work.

Fire department operations training is essential to improve safety when working in and around vacant and abandoned buildings. This training may also include evolutions for gaining access to boarded-up properties.

The key objective of any training is to point out the inherent dangers of the buildings and to inform the participants what the community is doing about the problem.

Additionally, community leaders may want to speak to citizen groups to keep them informed of what the community is doing to improve public safety and the community image by aggressively dealing with vacant/abandoned buildings.

Training materials are available as part of the IAAI/USFA Abandoned Building Program.
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 it 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.
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GIS Presentation of Data

Vacant/abandoned building data can then be formatted in a form most usable for departments and elected officials to use in the enforcement and decision making process. This is an example of a map generated in Wilson NC using GIS mapping software linked to vacant building address data.

This information can then be linked with building inspection/evaluation data and floor plans if they are available. This is discussed shortly in the presentation.

The use of GIS in the management of vacant and abandoned properties is discussed in detail in the Tool Box materials provided on the IAAI/USFA CD.
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

**OBJECTIVE:** Identify properties that are at risk of being abandoned before it occurs

These early warning signs, first used in New Haven, Connecticut, provide jurisdictions with a method to identify properties that are at risk of becoming vacant before it occurs. Monitoring properties and early intervention in the vacancy process while an owner is available is an important tool in preventing the properties from becoming a burden on the taxpayer.
Inspection and Evaluation

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

48 MASON ST.

WOODEN TRUSS ROOF

THIS ROOM ONLY!

ALL WINDOWS HAVE STEEL FRAME

NOTES:
- BUILDING HAS SECOND FLOOR, ON MASON STREET SIDE
- LIGHT WEIGHT STEEL TRUSS ROOF
- BOILER ROOM ONLY HAS WOOD TRUSS
- SPRINKLER SYSTEM IS INOPERATIVE, DOES HAVE FDC
- OCCUPIED GARAGE ATTACHED TO BUILDING
- BUILDING HAS NO OPERATIONAL UTILITIES
- NO BASEMENT

CEILING MISSING

552.50 sq. ft.

2248.72 sq. ft.

up

FDC

LOFT

AREA

OPEN STUD

WALL

EMPTY

OIL TANKS

OVERHEAD DOORS

MASON STREET

DOUBLE DOORS

SINGLE DOOR

COLUMNS

ELEVATOR SHAFT

W O O D

S T E E L

HAZARD

STAIRS

LEGEND

DANGER

SEVERE ROOF COLLAPSE

MASON STREET

INSTITUTIONAL LINENS INC

OCCUPIED GARAGE

ELECTRIC PANEL

SECOND STORY SHOWN ABOVE SHADED AREA

BOILER

!DANGER!

SEVERE ROOF COLLAPSE

CEILING COLLAPSE

OVERHEAD DOORS

M A S O N      S T R E E T

DOUBLE DOORS

SINGLE DOOR

COLUMNS

ELEVATOR SHAFT

W O O D

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BOILER

!DANGER!

SEVERE ROOF COLLAPSE

CEILING COLLAPSE

OVERHEAD DOORS

MASON STREET

Inspection and evaluation of vacant and abandoned properties allows officials to determine the potential hazards posed by a property and to take action as soon as the property is known to be vacant. The documentation developed during this process can provide valuable information that can be used by the community in deciding on how tax dollars should be allocated and by firefighters in the event of a fire in the building.

An evaluation form and associated training program is provide as part of the IAAI/USFA Abandoned Building Program.
Identification Process

- Alerts firefighters to the potential hazards in a vacant/abandoned building
- Makes public aware of problem properties
- Allows for increased surveillance

Marking buildings that are determined to be too hazardous for interior firefighting operations is another option available to the community. This process should be reviewed by the Fire Department and other officials and implemented if there is a need.

The system shown here is one adapted from the one used in New York City and implemented in the Commonwealth of Massachusetts after the Worcester fire.
Marking Buildings

- Severe structural or interior deficiencies
- Operations should be conducted from outside except for life safety
- If interior operations are required
  - Approval of Incident Commander
  - Modification of tactics
  - Examination before units are committed
- Time of any interior operations must be limited
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 structures are havens for criminal activity

Securing vacant and abandoned buildings is the first step in taking control of this insidious problem. To make any headway, unauthorized access MUST be prevented in vacant and abandoned buildings.
Short Term Solutions

- Provide building security
- Monitor security
- Remove combustibles
  - Interior
  - Exterior

Security measures such as boarding up openings, security guards, fencing, etc., are temporary measures. While they may be in place for a few years, eventually something must be done with the structure.
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Securing Buildings

- Prevents unauthorized access
- Must be done well
- Helps to slow down the deterioration of the structure

Security = Fire Prevention
Crime Prevention

If a building is well secured early in its vacancy, deterioration due to vandalism, fire and weather exposure should be significantly reduced. Security is a passive form of both fire and crime prevention. The key to building security is that it must be done well to be effective.
The importance of specifying the use of proper methods and materials is shown on this slide. Communities with no regulations regarding board-up procedures will get this type of work because the materials are the least expensive. Particle board is a very poor choice because it loses its integrity after it gets wet. After a few weeks, a particle board board-up can be easily breeched, usually without tools.
The building was boarded well on street level. On the 2nd floor, wood was easily pulled away without tools.

An example of what happens when there is a high threat of vandalism. Inspectors found a 12 pound sledge hammer on the adjacent roof.
Simple Board Up

This slide shows an example of a non reinforced board-up of a historic structure. Note vents and light panels on upper floors. This is the least complex and lowest cost method for securing a structure. It is also the easiest to breach.
The HUD reinforced method, also known as the USFA National Arson Prevention Initiative method, is the method of choice for high threat locations. It is the most secure type of board-up and also the most costly. 2 x 4 braces on both sides of the opening are compressed using 12-inch carriage bolts. This method requires significant effort to gain access when properly installed.

Details on securing structures are provided in the Building Security Module of the IAAI/USFA Abandoned Building Program.
A detail of a reinforced board-up of a window.
Fixing Broken Windows

Proper security will help to reduce crime, prevent fires and improve the image of vacant or abandoned properties

A well secured structure is the first step toward fixing the broken windows in a community. It provides security and improves the appearance of the building. Many communities require that the wood used in the board-up be painted to match the structure. Others work with community groups to put artwork on the materials.
In the long term the community must decide if the structure is a candidate for reuse or if it should be demolished. If the property is privately owned, the community may not have much say unless the structure is determined to pose a hazard to public safety. This demonstrates the need for an effective inspection/evaluation program for vacant structures.
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. 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.


See the Case Study in Reuse slides at the end of this program for more discussion on a successful reuse of an abandoned building.
Demolition is many times the most viable option. It is, however, expensive. Cities such as Utica, New York, and Lawrence, Massachusetts, have demonstrated that this approach can work using innovative funding sources and resources such as the National Guard.

Lewiston, Maine, uses local contractors for demolition and trucks the burnable components to a near-by waste-to-energy incinerator eliminating the cost of disposal.
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### Demolition

**Removal of obsolete or dangerous properties**

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ A permanent solution to problem buildings</td>
<td>✓ Can be costly</td>
</tr>
<tr>
<td>✓ Allows for new development</td>
<td>✓ May have negative impact on neighborhood</td>
</tr>
<tr>
<td></td>
<td>✓ Reduces affordable housing stock</td>
</tr>
</tbody>
</table>

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.
Dealing with vacant and abandoned buildings is an expensive proposition. With proper codes and ordinances in place, communities should be able to intervene in the vacancy/abandonment process early to identify an owner. If possible the cost of security/demolition should the owner’s responsibility.

Where there is no viable owner, the responsibility comes back to the community and eventually the taxpayer. Where no action has occurred for many years, addressing the problem will be extremely expensive. Communities that have been successful have used the resources available from federal programs such as HUD Community Development Block Grants and Livable Communities funds and coupled them with private funds and local funds.

EPA Brownfield funds have also been applied by some communities to assist in the redevelopment of properties that are considered to be contaminated. The application of these funds require that the community and the proposed site meet strict funding requirements.

Communities should also explore the relationship between crime and abandoned buildings and look at anti-crime funding sources administered through the Department of Justice.

How abandoned buildings are addressed and where the funds for solutions come from will be dependant on the community and the funding sources that are available to them. Interdepartmental cooperation and the development of private partnerships is critical in this effort. Where outside funding is required, it is very important that the Community Development Director for the community be involved in the process.

Developing liaisons with local business, civic organizations, and groups such as Habitat for Humanity and other organizations interested in housing and social issues can also help to reduce costs to the taxpayer.

Case studies of communities that have been successful in dealing with the abandoned building problem are included in the background materials for the IAAI/USFA Abandoned Building Program.
The Choice is Yours

Action

Inaction
A Case Study in Reuse

Vacant High School Building
Wilson NC 2001

The following slides are a case study in the successful reuse of an abandoned property. When first visited by the IAAI Abandoned Building Team the property was open to unauthorized entry, the windows and roof were open to the weather and the building was extremely dangerous to enter. When the Team revisited the Wilson in 2004 the building had been completely renovated by a private developer with incentives from the city. It is now a functional and attractive residential property in the center core of the city. The photos on the next several slides tell the story.
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[Image of an abandoned theater]
Vacant and Abandoned Buildings – Community Leader Program

![Image of a damaged building structure]

IAAI/USFA Abandoned Building Project
Vacant and Abandoned Buildings – Community Leader Program
Vacant and Abandoned Buildings – Community Leader Program

Building completely renovated into residential units by private developer with incentives from the community
Wilson NC  2004
Vacant and Abandoned Buildings – Community Leader Program
Architectural components of the original building preserved. The building is provided with automatic sprinklers.
It’s Your Choice