

# MITIGATION PLANNING

## FEMA REGION V

*short notes on planning #27*

### MITIGATION PLANNING AND ECONOMIC DEVELOPMENT

One might question what mitigation has to do with economic development. Some people feel that mitigation planning and its subsequent activities are anti-economic development, since activities may lead to the removal of land from development potential or may place additional requirements on developers. But in actuality, mitigation planning and its subsequent activities can be a benefit to economic development.

Economic development isn't just about bringing businesses to town and building structures. It's also about what will cause the businesses to want to come to town or what will keep them in town.

When businesses decide to relocate to a town or decide to stay in a town, they look at labor supply, the availability of properly zoned land, transportation, infrastructure, communications, the availability of public capital, and the quality of life. All of these assets can be linked to mitigation planning.

The labor supply depends on the availability of people as well as their education levels. If a community fails to take care of the life, health and safety of its residents, they will relocate out of town. If the schools are susceptible to damage, it can reduce the number of days that education is available and reduce the amount of money that is available to fund education activities. The availability of funds for education is also impacted by the affects of disasters on the general population, since the disaster may affect the availability of tax money.

The availability of properly zoned land means more than the

actions of the zoning board. Businesses do not want to locate at sites where their business will be closed several times a year due to flooding or where their employees can not make it to work when roads are blocked or there is damage to their homes. They also do not want to put vast amounts of money into a building that can fail due to high winds or the shaking of an earthquake.

Transportation, infrastructure and communications can all be impacted by a disaster. Roads can be impassible due to floods, debris from winds, tornadoes or ice storms, or the failure of bridges during an earthquake. The failure of infrastructure such as sewers and waterlines can cause a business to close until those utilities are available, especially if water is involved in the manufacturing process. The failure of communications can shut a business down since communications are necessary for computers, to make sales, to order supplies, and for many other aspects of the modern business.

The availability of public capital, or money, to support the relocation or expansion can be severely impacted by a disaster. If a community is forced to spend millions of dollars making roads, bridges, utilities and buildings useable after a disaster, they certainly are not going to be able to subsidize a business.

The quality of life can be intricately linked to mitigation planning. Quality of life is dependant on a safe place to work and live, amenities such as parks and greenways, historic preservation, and the availability of other recreational and cultural facilities. All of these aspects can be elevated to a higher quality level through good planning and use of mitigation projects.

### **Mitigation Projects**

An educated choice of good mitigation projects can go a long way toward improving the economic development potential of a community. As part of the mitigation plan, a community needs to decide what goals it wishes to achieve, determine what objectives and subsequent actions will meet those goals and then move to implement them. This document gives a few examples of actions that can encourage mitigation actions, but other documents such as Region V's Mitigation Ideas discuss many of the mitigation actions by hazard that can be used to reduce damages.

If earthquakes are one of the major hazards facing a community, retrofitting projects for critical facilities such as schools, fire and police stations, hospitals and other facilities can reduce damage and the loss of life. Projects can be inexpensive such as those to anchor buildings to their foundations or projects to ensure that non-structural items such as lights, shelves, and other equipment don't fall to the ground. They can be as expensive as gutting a building and re-enforcing the frame of the structure. The retrofitting of bridges can prevent the loss of major portions of a transportation system.

If flooding is the major hazard, buy-outs, elevation or floodproofing may be used. Floodproofing can only be used for non-residential sites, but can protect millions of dollars of equipment and inventory. Elevation of a structure can raise the area subject to

damage above the flood level. Buy-outs remove the structure at risk and can provide the community with much needed open space.

If high winds and tornadoes are the major hazard, retrofitting of buildings can reduce damage, the use of saferooms can save lives, and the placement of utilities underground can reduce the chances of interruption. Re-enforcing buildings can reduce the damage from high winds by keeping elements of the building from ripping loose. If the elements don't rip loose, it not only prevents damage to the original structure, but also any structures that they may hit by those elements. In the case of tornadoes, retrofitting may prevent some damage from slower speed tornadoes and prevent damage to structures on the fringe of the area that the tornado strikes. Saferooms can be used in single-family and multi-family structures, commercial structures, schools and other critical facilities, parks, and industrial facilities. They give the residents a safe haven to move to when tornadoes are imminent. By requiring new and replaced utilities such as electrical and telecommunication lines to be put underground can reduce the down-time from the loss of these utilities that are critical to our daily lives.

Remember! The choice of the right mitigation actions can protect the residents of your community, can reduce the damages and resulting costs to your community, can reduce down time and can provide your community with recreation and open space area.