



Safe Rooms Add Life to Neighborhoods

Full Mitigation Best Practice Story

Oklahoma County, Oklahoma



Oklahoma City, OK - Residents of the Oklahoma City metropolitan area wonder each year what May weather will bring. In May 1999, multiple tornadoes left 44 dead and more than 8,000 buildings damaged or destroyed. Four years later another May tornado, closely following the 1999 path, imposed far less damage. All because residents as well as City and State officials embraced mitigation measures leading to safe rooms being built in neighborhood schools across the City.

Following the May 1999 outbreak, the State looked to the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP) to provide money for building safe rooms. The HMGP funds were also used as part of a rebate program to encourage the building of safe rooms in schools. Oklahoma City's Program Manager Eric Wenger said, "We participated in the [safe room] project because we had a number of schools facing rebuilding or remodeling, so we seized the opportunity."

Several schools chosen for the safe room project were already part of a City-wide school revitalization program called MAPS for Kids, the second phase of a program for Metropolitan Area Public Schools (MAPS). In 2001, Oklahoma City voters approved for the MAPS program to be funded with a penny sales tax increase and a bond issue for a total funding of \$680 million over a 10-year period. The MAPS funds generated would be used to renovate and revitalize neighborhood schools. In addition, the \$2,291,250 in HMGP funds allowed the construction of safe rooms for five MAPS for Kids schools: four new facilities and one renovation project.

Safe room construction, which began in April 2004, complied with the Americans with Disabilities Act design specifications as well as FEMA 361, Design and Construction Guidelines for Community Shelters. MAPS for Kids also designed the school safe rooms as multi-use facilities, doubling as locker rooms, classrooms, dance studios, or music rooms.

The combined funding efforts of MAPS for Kids and FEMA's HMGP have helped re-energize not only schools but also surrounding neighborhoods as well.

"The MAPS for Kids program is revitalizing many Oklahoma City neighborhoods and the school projects have helped us add to the overall successes of the community," Wenger said. "Now when we build new schools, patrons ask if the project will include a safe room."

Activity/Project Location

- Geographical Area: **Single County in a State**
- FEMA Region: **Region VI**
- State: **Oklahoma**
- County: **Oklahoma County**
- City/Community: **Oklahoma City**

Key Activity/Project Information

Sector: **Public**
Hazard Type: **Tornado**
Activity/Project Type: **Safe Rooms/Community Shelters**
Structure Type: **Concrete, Reinforced**
Activity/Project Start Date: **04/2004**
Activity/Project End Date: **Ongoing**
Funding Source: **Hazard Mitigation Grant Program (HMGP)**
Funding Recipient: **Critical Facility - School**
Funding Recipient Name: **Oklahoma City Public Schools**
Application/Project Number: **1401-280-R**

Activity/Project Economic Analysis

Cost: **\$2,291,250.00 (Actual)**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**
Federal Disaster #: **1401 , 02/01/2002**
Federal Disaster Year: **2002**
Value Tested By Disaster? **No**
Repetitive Loss Property? **No**

Reference URLs

Reference URL 1: <http://www.okc.gov/ocmaps/index.html>
Reference URL 2: <http://www.fema.gov/plan/prevent/saferoom/index.shtm>

Main Points

- In May 1999, tornadoes left 44 dead and more than 8,000 buildings damaged or destroyed in Oklahoma City.
- As a response, the Oklahoma Department of Emergency Management developed a safe room rebate program for residents.
- The State also looked to HMGP to provide money for safe rooms in schools, which provided the rebate for applicants to build residential and school safe rooms.
- Several schools chosen for the safe room project were already part of a city-wide school revitalization program called MAPS for Kids, the second phase of a program for Metropolitan Area Public Schools (MAPS).
- MAPS for Kids funds will renovate and revitalize 75 neighborhood schools across the district over a ten-year period.
- MAPS for Kids designed the school safe rooms as multi-use facilities doubling as locker rooms, classrooms, dance studios, or music rooms.
- As a result, when another May tornado hit four years later, closely following the 1999 path, Oklahoma City levied far less damage.



The future site of a MAPS for Kids school includes a safe room used during severe weather.



A safe room being used as locker room