

Federal Housing Administration

Department of Housing and Urban Development Washington, D.C. 20410

Mission:

The Federal Housing Administration administers Federal housing programs that increase the quality and affordability of housing to help achieve its legislative mandate of providing decent, safe, and sanitary housing in a suitable living environment for every American family by enhancing the strength and stability of the Nation's housing markets.



Community revitalization and subsidized public housing construction.

Contact:

Robert Fuller, Manufactured Housing and Construction Standards Division, HUD Tel: 202-755-7430 Fax: 202-755-7445

Major Activities to Reduce Effects of Natural Hazards

- Develop Minimum Property Standards (MPS) for design and construction of single-family, multifamily, and public housing projects and Manufactured Housing Construction and Safety Standards (MHCSS) for manufactured housing to resist natural hazards
- Perform risk and vulnerability assessments of existing residential construction under HUD programs, and retrofit and strengthen buildings to resist natural hazards
- Train professional engineers for post-disaster investigation and maintain and equip quick-response, post-disaster investigation teams
- Provide natural disaster reduction information to all HUD Field Offices, and disseminate information to civil engineers at local, State, and Federal levels
- Provide structural engineering review and analysis of designs of new and existing residential buildings to assure resistance to natural hazards
- Conduct building technology research and test residential building components and systems to assure adequate and cost-effective resistance to natural hazards; foster inter-agency agreements with other Federal agencies for research and testing
- Maintain representation on building code and standards committees to upgrade the natural hazard provisions to current state of knowledge; recommend revisions to building codes and standards



National Aeronautics and Space Administration

Headquarters Building 300 E. Street, SW Washington, D.C. 20546

Mission:

NASA uses the unique vantage point of space to obtain information about the Earth, its land, atmosphere, and oceans, and the processes and interactions that occur among these domains. Environmental and hazards research focuses on the development, implementation, and application of new and improved remote sensing and high-resolution space geodetic systems and modeling and data analysis techniques for such research.



Clockwise from top photograph: Environmental Satellite GOES I-M; geodetic laser ranging station in operation; tracking sulfur dioxide cloud from Mt. Pinatubo; 90 m-high lava fountain associated with Kilauea eruption.

Contact:

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Major Activities to Reduce Effects of Natural Hazards

- Conduct fundamental research on processes of hazard occurrence and recurrence
- Perform space-based hazard mapping, risk assessment, and monitoring, detecting minute changes in topography, measuring volcanic inflation and deflation and thermal properties, tracking and modeling volcanic plumes, monitoring crustal deformation and strain buildup to assess earthquake hazards, tracking and warning for severe storms, monitoring wild fires and landslides
- Develop information and communications systems for information dissemination and disaster mitigation



National Institute of Standards and Technology

U.S. Department of Commerce Gaithersburg, Maryland 20899-0001

Mission:

NIST's Building and Fire Research Laboratory (BFRL) is dedicated to improving the life cycle quality of constructed facilities. Its performance prediction and measurement technologies enhance the competitiveness of U.S. industry and public safety. The laboratory studies structural, mechanical, and environmental engineering, fire science and fire safety engineering, building materials, and computer-integrated construction practices.



Evaluating innovative precast beam-column connections subjected to earthquake loads.

Major Activities to Reduce Effects of Natural Hazards

- Perform research and development to improve practices, standards, and codes for new and existing buildings and lifelines to reduce loss from earthquakes, extreme winds, and fire
- Identify mechanisms of failure and establish criteria to ensure structural safety
- Create technical criteria and methods to strengthen and repair buildings and lifelines
- Develop methods to predict the behavior of fire and smoke and to enable high-performance fire detection and suppression systems

Contact:

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