

Colorado County adopts NIST community resilience guidelines

July 1 2016



A damaged roadway after the September 2013 flooding in Colorado is pictured. The disaster spurred Boulder County communities to develop a resilience design performance standard largely based on NIST's "Community Resilience Planning Guide." Credit: S. Sederberg, Colorado Department of Transportation

The Boulder County Collaborative, a partnership of Boulder County,



Colorado, communities formed in response to the catastrophic floods that struck the region in September 2013, has used the National Institute of Standards and Technology (NIST) "Community Resilience Planning Guide for Buildings and Infrastructure Systems" to develop and adopt its own resilience design performance standard for community facilities and infrastructure systems.

This marks one of the first times that the strategies and procedures in the NIST Guide have been followed on a large community scale.

The new Boulder County standard will allow the cities and towns within the Collaborative (Boulder, Lafayette, Longmont, Louisville, Jamestown, Lyons and Nederland) to establish long-term "time-to-recovery" goals for all hazards that could affect the county's building clusters and the infrastructure systems (energy, water, bridges, culverts, etc.) that support them. Based on the NIST guidelines, these goals set the desired resilience performance—the ability to prepare and plan for, absorb, recover from and adapt to hazards—for both structures and infrastructures over a long time period (defined by Boulder County as 50 years).

"The power of the NIST approach to community resilience," stated the county report detailing the Collaborative standard, "is that these time-to-recovery goals for facilities are not considered in isolation. The infrastructure that supports the facilities must also meet the goal."

The report also cited the NIST process for focusing on "clusters" of buildings that provide similar functions for their communities such as housing, healthcare and retail. "Organizing the built environment into clusters provides a basis for developing an estimate of how to prioritize systems for recovery and sets a workable timeline goal for recovery after a disaster," the report stated.



The NIST Guide (NIST Special Publication 1190), which offers communities a six-step process to strengthen planning for improving community resilience, stresses the need to involve all stakeholders, including vulnerable populations. It provides a practical and flexible approach to help communities improve their resilience by setting priorities and allocating resources to manage risks for their prevailing hazards.

Provided by National Institute of Standards and Technology

Citation: Colorado County adopts NIST community resilience guidelines (2016, July 1) retrieved 27 April 2024 from

https://phys.org/news/2016-07-colorado-county-nist-resilience-guidelines.html

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