Nuclear Device City Planner Resource (nucCPR)

The nucCPR tool helps federal and state, local, tribal, and territorial (SLTT) response and exercise planners better prepare resources and personnel to save lives.

This interactive, web-based strategic planning tool provides more realistic visualizations of release behavior and impact estimates to help planners understand how an event may unfold, its impacts, and potential response actions. Federal and SLTT emergency managers can use nucCPR to plan responses and inform the development of city-specific exercises. FSLTT planners can also use nucCPR to identify required response resources and personnel before an event happens. The tool's editable reports and customizable maps can be repurposed in various planning documentation and presentations. NucCPR offers:

Planning and exercise tools

The nucCPR tool provides animations, maps, movies, and downloadable, editable reports to develop response planning and exercises for your city.

10 scenarios for 60 U.S. cities

nucCPR provides detailed, in-depth impact analysis for 60 U.S. cities: 10 scenarios covering a noon release in the downtown business district for yields of 1 or 10 kilotons, and five statistically predominant weather patterns (one year-long and four seasons).

Animated fallout effects

Downloadable animations show how fallout effects evolve from detonation to one year, making it easy to visualize event progression during exercises and plan transportation, evacuation, and sheltering.

Resource planning

Detailed nucCPR scenario reports help planners identify the scale of needed resources for medical, first responder, transportation, evacuation and sheltering, and debris removal. Downloadable, editable reports include event progression, injury and casualty analysis, and infrastructure impacts for each scenario.

Maps for evacuation and shelter planning

The nucCPR tool provides scenario specific information on dispersion patterns for five predominant weather patterns for each city, plus Interagency Modeling and Atmospheric Assessment Center (IMAAC) briefing and technical products. GIS maps show the protective effects of buildings for sheltering in place at the census block level.

Interactive Geographic Information System (GIS) display

The GIS-based user interface can overlay weapon effects on key infrastructure and local shelter data on customizable maps for reports and presentations, including downloadable GIS/kmz shapefiles for use by SLTT planners.

The nucCPR tool is available through the FEMA Preparedness Toolkit. To request access to the tool, log into the FEMA PrepToolkit and apply for access to the tools from the Preparedness Toolkits section. Please reach out to FEMA's Office of Emerging Threats (FEMA-OET@fema.dhs.gov) with questions.

