

Polk County Emergency Management

Multi-Year Training and Exercise Plan (MYTEP) 2017-2022

12 May 2017

EXECUTIVE SUMMARY

This Multi-Year Training and Exercise Plan (MYTEP) serves as a guidance document for exercise conduct county-wide. Through the MYTEP process efficiencies can be gained by identifying and consolidating exercises and/or trainings to break down silos among disciplines, reduce exercise costs by avoiding duplication, and prevent exercise fatigue. The MYTEP is a living document, subject to continual review and revision. The plan will be updated annually and will reflect a five-year cycle.

Included in this plan are the following:

- Methodology and supporting data
- Programmatic priorities
- Schedule of pending exercises
- Schedule of pending trainings
- National Level priorities
- Core Capabilities
- Exercise definitions

Through an exhaustive review of after action reporting and analysis of survey responses, the areas of *Operational Coordination*, *Operational Communications*, and *Planning* were identified as program priority areas where additional training and exercises are needed.

While Emergency Management cannot mandate that departments prepare After-Action Reports for exercises, it is highly recommended. These After-Action Reports should be shared with Polk County Emergency Management to validate and improve this document and exercise planning in general.

PREFACE

Polk County Emergency Management continues to pursue a coordinated emergency management strategy that combines building strengths, identifying specific areas for improvement, and identifying training and exercises to strengthen the county's ability to protect the whole community from all hazards.

The collection of data supporting this year's MYTEP was gathered in two phases:

- Phase 1: Reviewing data from previous training and exercises held within the county. This was accomplished by reviewing participant feedback forms, after action reports, and improvement plans.
- Phase 2: Gathering and reviewing the responses to an electronic survey. This survey was sent to representatives of each jurisdiction in the county, all fifteen (15) emergency support functions, and private partners. In addition to prioritizing hazards and identifying desired training, participants were charged with identifying planned and anticipated exercise requirements. It is the goal of this plan to capitalize on windows of opportunity to consolidate exercise needs with other participants when appropriate to save money and resources as well as to potentially enhancing the value of the training and exercise experience.

The findings of this report will be validated through a Training and Exercise Planning Workshop (T&EPW). The active participation of those attending the workshop will ensure the consolidated, collaborative effort to identify common priorities and windows of time where they could train and exercise together when appropriate. By executing the MYTEP as written, Polk County would save precious money and resources while potentially increasing the value of these future training/exercise experiences for the participants.

Points of Contact (POCs)

Agency Director:

A.J. Mumm
Director
Polk County Emergency Management Agency
1907 Carpenter Ave
Des Moines, Iowa 50314
515-286-2107 (office)
AJ.Mumm@PolkCountyIowa.gov

Exercise Point of Contact:

Jon Davis
Deputy Director
Polk County Emergency Management Agency
1907 Carpenter Ave
Des Moines, Iowa 50314
515-286-2107 (office)
Jon.Davis@PolkCountyIowa.gov

PURPOSE

The Multi-Year Training and Exercise Plan (MYTEP) provides a framework to allow cooperation and collaboration between local, state, and federal partners when it comes to training and exercises so that Polk County is better prepared to deal with incidents and events as they develop.

The purpose of the Training and Exercise Plan is to provide a list of core capabilities that identifies what areas the State of Iowa needs to sustain as well as areas for improvement in the areas of training, planning, and exercise development.

Included in this MYTEP is a training and exercise schedule, which provides a graphic illustration of the proposed activities scheduled for the years 2017 through 2021.

METHODOLOGY

To develop countywide program priorities, Polk County Emergency Management staff utilized the following:

- After Action Reports from within Polk County
- Results from regional Training and Exercise Workshops
- The 2016 State of Iowa Training and Exercise Plan
- Polk County Emergency Management's Multi-Jurisdictional Hazard Mitigation Plan
- Partner survey

Polk County Emergency Management staff reviewed and validated improvement areas identified in After Action Reports. Improvement items were then categorized under appropriate U.S. Department of Homeland Security Core Capabilities as detailed in the National Preparedness Goal. The capabilities were then validated and prioritized. These identified priority areas were validated against regional Training and Exercise Workshops that were conducted across the State, as well as the 2016 State of Iowa Training and Exercise Plan.

Polk County Emergency Management's Multi-Jurisdictional Hazard Mitigation Plan is updated every five (5) years. A part of that process includes a comprehensive hazard analysis risk assessment. Hazards are ranked based on a mathematical calculation based on the following criteria: Historical occurrence, probability, severity, vulnerability, extent, and speed of onset. Only natural disasters are analyzed in the process.

In late 2016, Polk County Emergency Management distributed a partner survey to identify top perceived risks, focus areas, training opportunities, and planned exercises. No restrictions were placed on respondents and they were allowed to consider both natural and man-made disasters.

Together, the above items guide the county's Multi-Year Training and Exercise program with the following goals:

- Challenge participants with increasingly advanced coursework and scenarios;
- Incorporate, reinforce, and verify lessons learned;
- Identify demonstrated capabilities and areas in need of improvement;
- Provide a means of evaluation and corrective action for exercises
- Ensure a method to share lessons learned and best practices from training courses and exercises.

After Action Review

Polk County Emergency Management was able to identify twenty-one (21) exercises and/or incidents that had a formal written after-action report from November 2011 through February 2017. The following table lists the core capabilities that were identified in the after-action reports as areas for improvement and the number of times those capabilities occurred. If the core capability is not included in the table, it did not appear as an opportunity for improvement or was not an objective in the exercise.

Core Capability	# of times it appeared as opportunity for improvement
Operational Communications	13
Operational Coordination	12
Planning	7
Public Health, Healthcare, and Emergency Medical Services	7
Public Information and Warning	4
Mass Search & Rescue Operations	3
Access Control & Identity Verification	2
Critical Transportation	2
Environmental Response/Health & Safety	2
Intelligence & Information Sharing	2
On-Scene Security, Protection, & Law Enforcement	2
Situational Assessment	2
Economic Recovery	1
Infrastructure Systems	1
Logistics & Supply Chain Management	1

Survey Results

Survey respondents were asked which capabilities Polk County Emergency Management should focus their efforts over the next year (column 2). They were also asked for their assessment of the "expected success" for each of the core capabilities with 0 being total failure and 100 being overwhelming success (column 3). The following table documents those responses.

Core Capability	Respondents who thought this capability should get priority attention	Respondents Estimate of Expected Success
Operational Communications	14	60%
Operational Coordination	11	67%
Planning	9	72%
Cybersecurity	8	55%
Housing	7	58%
Intelligence & Info. Sharing	6	66%
Long-term Vulnerability Reduction	5	56%
Community Resilience	4	71%
Critical Transportation	4	66%
Mass Care Services	4	60%
Situational Assessment	4	75%
Threats & Hazards Identification	4	77%
Interdiction & Disruption	3	63%
Mass Search & Rescue Operations	3	56%
Natural & Cultural Resources	3	64%
On-Scene Security, Protection, & Law Enforcement	3	74%
Risk Management for Protection Programs & Activities	3	64%
Access Control & Identity Verification	2	65%
Economic Recovery	2	66%
Environmental Response/Health & Safety	2	66%
Fatality Management Services	2	58%
Forensics and Attribution	2	56%
Infrastructure Systems	2	67%
Physical Protective Measures	2	64%
Public Health, Healthcare, and Emergency Medical Services	2	71%
Public Information and Warning	2	78%
Risk & Disaster Resilience Assessment	2	67%
Supply Chain Integrity & Security	2	62%
Fire Management & Suppression	1	77%
Health & Social Services	1	66%
Logistics & Supply Chain Management	1	66%
Screening, Search, & Detection	0	65%

Risk Assessment

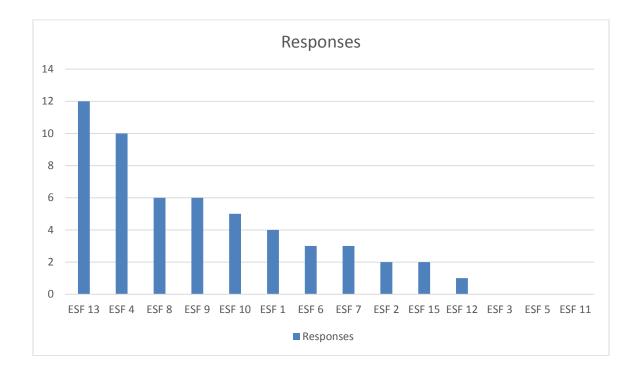
The following table illustrates the top five (5) hazards survey respondents are most concerned with versus those identified in the Polk County Emergency Management's Multi-Jurisdictional Hazard Mitigation Plan in order of risk. Only natural hazards are considered in the current hazard mitigation plan.

For a full assessment of risk, during the next revision of the Polk County Emergency Management's Multi-Jurisdictional Hazard Mitigation Plan, it is recommended that man-made disasters also be considered.

Survey Responses	# of Responses	Hazard Mitigation Plan
Active Threat	18	River Flooding
Terrorism	13	Winter Storm
Hazardous Materials	14	Flash Flood
Severe Weather	11	Hazardous Materials
Cyber Security/Terrorism	9	Structural Fire
Civil Unrest/Rioting	7	Transportation Incident
Thunderstorms/Tornado	7	Tornado
Fire	6	Levee Failure
Flood	6	Windstorm
Pandemic	6	Thunderstorm/Lightning/Hail
Structure Fire	6	Drought
Natural Disaster (otherwise not defined)	4	Human Disease
Transportation Incident	4	Infrastructure Failure
Bomb/Explosives	3	Dam Failure
Blizzard	2	Grass/Wildland Fire
Large Scale Event/Demonstration	2	Extreme Heat
Power Grid Failure	2	Animal/Plant/Crop Disease
Racism/Tension	2	Earthquake
Structural Collapse	2	Expansive Soils
Attacks on Public Safety	1	Sinkholes/Landslide
Aviation Security	1	
Buckeye Fuel Terminal	1	
Chemical Release	1	
Combating Violent Extremism	1	
Commercial Airline Crash	1	
Drinking Water Shortage	1	
Grain Bin Entrapment	1	
Hate & Discontent towards Law Enforcement	1	
High Traffic on Interstates	1	
Information System Failure	1	

Survey Responses	# of Responses	Hazard Mitigation Plan
Loss of Key Personnel	1	
Lost horses/livestock	1	
Mass Exodus	1	
Mass Casualty Incident	1	
Media Control	1	
Post Suicide Response	1	
Swift Water Rescue	1	
Weapon of Mass Destruction Event	1	
Workplace Violence	1	
Communications @ hotels	1	

Survey Demographic



PROGRAM PRIORITIES

The following capabilities were identified in the survey as those most needing improvement:

- 1. *Operational Communications:* Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.
- 2. *Operational Coordination:* Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
- 3. *Planning:* Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
- 4. *Public Health, Health Care and Emergency Medical Services:* Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support, and products to all affected populations.
- 5. *Public Information and Warning:* Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.

Supporting Training Courses:

The following training courses have been identified to support program priorities:

Operational Communications:

- All-Hazards Communications Unit Leader (COML)
- All-Hazards Communications Technician (COMT)

Operational Coordination:

- TEEX IMS300 ICS 300: Intermediate ICS for Expanding Incidents (January 2018)
- TEEX MGT-347 Incident Command System (ICS) Forms Review (January 2018)
- TEEX IMS400 ICS 400: Advanced ICS for Command and General Staff (March/April 2018)
- G-191: Incident Command System/Emergency Operations Center Interface
- TEEX MGT-346 EOC Operations and Planning for All-Hazards
- TEEX MGT-340 Crisis Leadership & Decision Making for Elected Officials (September 14th, 2017)
- IMTC Finance/Administration Section Chief
- C3 Pathways Active Shooter Incident Management Training

Planning:

EMRTC/NMT Understanding and Planning for School Bomb Incidents (UPSBI)

Public Information & Warning:

- TEEX MGT-318 Public Information in an All-Hazards Incident (November 13-14, 2018)
- G-290: Public Information Officer Basic
- L-0388: Advanced Public Information Officer
- Event Media Relations During Critical Incidents

Other:

- Hazardous Materials Awareness
- Hazardous Materials Operations
- G-139 Exercise Design
- L-146 Homeland Security Exercise Evaluation Program Basic Course
- NTSB Transportation Disaster Response Family Assistance

 Building Safety Assessment & Failure Evaluation (BSAFE) Damage Assessment Training

MULTI-YEAR TRAINING AND EXERCISE SCHEDULE

The following calendars only reflect training and exercises hosted at or by Polk County Emergency Management. Some program priorities are addressed by training offered elsewhere within the region or state.

Additional training opportunities may be viewed at http://homelandsecurity.iowa.gov/training/.

It should be noted that calendars beyond the current year, while mostly appearing incomplete, do have recurring exercises listed. The calendars are "living documents" and as such additional events will be added as training and exercise planning is completed.

Program Priorities Addressed:

Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Exercise
Operational Communications	Operational Coordination	Planning	Public Health, Health Care and Emergency Medical Services	Public Information and Warning	not tied to a priority

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Jan 10th Waukee Active Shooter full scale	Feb 27- March 3 71st CST certification full scale exercise	March 8-9 Iowa WMD Hazmat Exercise	April 19 Health Dept. Extreme Heat TTX	May 6-7 ICS 400	June 22 Safeguard Iowa Partnership Power Outage TTX	July 20 Multi- Disc. Lunch and Learn: ESF #3	Aug 22nd DSM Airport Tabletop	Sept 16 th Waukee Full Scale Exercise	Johnston PD TTX Oct 25th	Grid EX TBD	Region VII TEPW TBD
January 19 Multi-Disc. Lunch and Learn: ESF #1		March 15 Drake Medical Drill	April 26 th Story County EOC Exercise	May 18 Multi-Disc Lunch and Learn: ESF #2			Johnston PD TTX Aug 23	lowa TEPW TBD Facebook Tabletop Sept 13	lowa HSEMD Conference	May 18 Multi-Disc Lunch and Learn: ESF #10	
		March 16 Multi-Disc Lunch and Learn: ESF #2					National Guard Active Shooter Full Scale TBD	Sept 7-8 National Guard Communications Exercise Sept 27th Johnston PD TTX	Saylor FD Mass Casualty TTX TBD	Johnston PD TTX Nov 8 th or 22nd	
		Mar 18-19 ICS 300						Sept 5 th NDMS Functional Exercise Sept 8th NDMS Full Scale			
		March 21 st 132 nd Active Shooter Tabletop						Ankeny Tornado TTX TBD Sept 9-10 National Guard Civil Disturbance Exercise			
MICRN and SIP radio test	MICRN and SIP radio test	March 24 Clive Flood TTX March 29 StateTornado Drill	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	Sept 21 Multi-Disc Lunch and Learn: ESF #3 MICRN and SIP radio test Sept 13 th Jordan Creek Town Center TTX	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test
WebEOC drill		MICRN and SIP radio test WebEOC drill		Web EOC drill		Web EOC drill		Web EOC drill Sept 26 IOWARN tabletop		Web EOC drill	

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		Statewide Tornado Drill					DSM Airport Full Scale Exact date TBD		Iowa HSEMD Conference		Region VII TEPW
								Iowa TEPW			
MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test
WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill	

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		Statewide Tornado Drill					DSM Airport Tabletop		Iowa TEPW		Region VII TEPW
									Iowa HSEMD Conference		
MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test
WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill	

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		Statewide Tornado Drill					DSM Airport Functional Exercise		Iowa TEPW		Region VII TEPW
									lowa HSEMD Conference		
MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test
WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill	

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		Statewide Tornado Drill					DSM Airport Full Scale		Iowa TEPW		Region VII TEPW
									lowa HSEMD Conference		
MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test	MICRN and SIP radio test
WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill		WebEOC drill	

APPENDIX A: NATIONAL PRIORITIES

National Priorities

The following eight National Priorities were established in the Department of Homeland Security's National Preparedness Goal* (Second Edition, September 2015).

- 1. Implement NIMS and the NRF
- 2. Expand Regional Collaboration
- 3. Implement the National Infrastructure Preparedness Plan (NIPP)
- 4. Strengthen Information Sharing and Collaboration Capabilities
- 5. Strengthen CBRNE Weapons Detection, Response, and Decontamination Capabilities
- 6. Strengthen Interoperable Communications Capabilities
- 7. Strengthen Medical Surge and Mass Prophylaxis Capabilities
- 8. Strengthen Emergency Operations Planning and Citizen Protection Capabilities
 - Using the core capabilities, we achieve the National Preparedness Goal by: Preventing, avoiding, or stopping a threatened or an actual act of terrorism.
 - Protecting our citizens, residents, visitors, and assets against the greatest threats and hazards in a manner that allows our interests, aspirations, and way of life to thrive.
 - Mitigating the loss of life and property by lessening the impact of future disasters.
 - Responding quickly to save lives, protect property and the environment, and meet basic human needs in the aftermath of a catastrophic incident.
 - Recovering through a focus on the timely restoration, strengthening, and revitalization of infrastructure, housing, and a sustainable economy, as well as the health, social, cultural, historic, and environmental fabric of communities affected by a catastrophic incident

^{*}The National Preparedness Goal may be viewed at http://bit.ly/2nKSdHk.

APPENDIX B: CORE CAPABILITIES LIST

The Core Capabilities, along with their definitions, are contained within The National Preparedness Goal. The National Preparedness Goal may be viewed at http://bit.ly/2nKSdHk.

Prevention Core Capabilities

Planning
Public Information and Warning
Operational Coordination
Forensics and Attribution
Intelligence and Information Sharing
Interdiction and Disruption
Screening, Search, and Detection

Protection Core Capabilities

Planning
Public Information and Warning
Operational Coordination
Access Control and Identity Verification
Cybersecurity
Intelligence and Information Sharing
Interdiction and Disruption
Physical Protective Measures
Risk Management for Protection Programs and
Activities
Screening, Search, and Detection
Supply Chain Integrity and Security

Mitigation Core Capabilities

Planning
Public Information and Warning
Operational Coordination
Community Resilience
Long-term Vulnerability Reduction
Risk and Disaster Resilience Assessment
Threats and Hazard Identification

Response Core Capabilities

Planning
Public Information and Warning
Operational Coordination
Critical Transportation
Environmental Response/Health and Safety
Fatality Management Services
Fire Management and Suppression
Logistics and Supply Chain Management
Infrastructure Systems
Mass Care Services
Mass Search and Rescue Operations
On-scene Security and Protection
Operational Communications
Public Health and Medical Services
Situational Assessment

Recovery Core Capabilities

Planning
Public Information and Warning
Operational Coordination
Economic Recovery
Health and Social Services
Housing
Infrastructure Systems
Natural and Cultural Resources

APPENDIX C: EXERCISE TYPES

Discussion-Based Exercises

Discussion-based exercises are normally used as starting points in the building block approach to the cycle, mix, and range of exercises. Discussion-based exercises include seminars, workshops, tabletop exercises (TTXs), and games. These types of exercises typically highlight existing plans, policies, mutual-aid agreements (MAAs), and procedures. Thus, they are exceptional tools for familiarizing agencies and personnel with current or expected jurisdictional capabilities. Discussion-based exercises typically focus on strategic policy-oriented issues; operations-based exercises focus more on tactical response-related issues. Facilitators and/or presenters usually lead the discussion, keeping participants on track while meeting the objectives of the exercise.

Seminars

Seminars are generally used to orient participants or provide an overview of authorities, strategies, plans, policies, procedures, protocols, response resources, or concepts and ideas. Seminars provide a good starting point for jurisdictions that are developing or making major changes to their plans and procedures. They offer the following attributes:

- Informal discussions led by a seminar leader
- Lack of time constraints caused by real-time portrayal of events
- Low-stress environment employing a number of instruction techniques such as lectures, multimedia presentations, panel discussions, case study discussions, expert testimony, and decision support tools
- Proven effectiveness with both small and large groups

Workshops

Workshops represent the second tier of exercises in the Homeland Security Exercise and Evaluation Program (HSEEP) building block approach. Although similar to seminars, workshops differ in two important aspects: participant interaction is increased, and the focus is on achieving or building a product (such as a plan or a policy). Workshops provide an ideal forum for the following:

- Building teams
- Collecting or sharing information
- Obtaining consensus
- Obtaining new or different perspectives
- Problem solving of complex issues
- Testing new ideas, processes, or procedures
- Training groups in coordinated activities

In conjunction with exercise development, workshops are most useful in achieving specific aspects of exercise design such as the following:

- Determining evaluation elements and standards of performance
- Determining program or exercise objectives
- Developing exercise scenario and key events listings

A workshop may be used to produce new standard operating procedures (SOPs), Emergency Operations Plans (EOPs), MAAs, Multi-Year Exercise Plans, and Improvement Plans (IPs). To be effective, workshops must be highly focused on a specific issue, and the desired outcome or goal must be clearly defined. Potential relevant topics and goals are numerous, but all workshops share the following common attributes:

- Effective with both small and large groups
- Facilitated, working breakout sessions
- Goals oriented toward an identifiable product
- Information conveyed employing different instructional techniques
- Lack of time constraint from real-time portrayal of events
- Low-stress environment
- No-fault forum
- Plenary discussions led by a workshop leader

Table Top Exercises (TTX)

TTXs involve senior staff, elected or appointed officials, or other key personnel in an informal setting, discussing simulated situations. This type of exercise is intended to stimulate discussions of various issues regarding a hypothetical situation. It can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the prevention of, response to, and recovery from a defined incident. TTXs are typically aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and/or achieving a change in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem solving rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions.

In contrast to the scale and cost of operations-based exercises and games, TTXs can be cost-effective tools when used in conjunction with more complex exercises. The effectiveness of a TTX is derived from the energetic involvement of participants and their assessment of recommended revisions to current policies, procedures, and plans.

TTX methods are divided into two categories: basic and advanced. In a basic TTX, the scene set by the scenario materials remains constant. It describes an event or emergency incident and brings discussion participants up to the simulated present time. Players apply their knowledge and skills to a list of problems presented the facilitator, problems are discussed as a group, and resolution is generally agreed upon and summarized by the leader. In an advanced TTX, play focuses on delivery of pre-scripted messages to players that alter the original scenario. The exercise facilitator usually introduces problems one at a time in the form of a written message, simulated telephone

call, videotape, or other means. Participants discuss the issues raised by the problem, using appropriate plans and procedures. TTX attributes may include the following:

- Achieving limited or specific objectives
- Assessing interagency coordination
- Conducting a specific case study
- Examining personnel contingencies
- Familiarizing senior officials with a situation
- Participating in information sharing
- Practicing group problem solving
- Testing group message interpretation

Games

A game is a simulation of operations that often involves two or more teams and uses rules, data, and procedures to depict an actual or assumed real-life situation. The goal of a game is to explore decision-making processes and the consequences of those decisions. A game does not require use of actual resources, and the sequence of events affects, and is in turn affected by, decisions made by players.

With the evolving complexity and sophistication of current simulations, opportunities to provide enhanced realism for game participants have increased. Computer-generated scenarios and simulations can provide a more realistic and time-sensitive method of introducing situations for analysis. Planner decisions can be input into realistic models to show the effects of decisions made during a game. Internet-based, multi-player games offer many additional benefits, such as saving money by reducing travel time, offering more frequent training opportunities, and taking less time away from primary functions. They also provide a collaborative environment that reflects realistic occurrences.

Operations-Based Exercises

Operations-based exercises are used to validate the plans, policies, agreements, and procedures solidified in discussion-based exercises. Operations-based exercises include drills, functional exercises, and full-scale exercises (FSEs). They can clarify roles and responsibilities, identify gaps in resources needed to implement plans and procedures, and improve individual and team performance. Operations-based exercises are characterized by actual response, mobilization of apparatus and resources, and commitment of personnel, usually over an extended period of time.

Drills

A drill is a coordinated, supervised activity usually used to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include the following:

- A narrow focus, measured against established standards
- Instant feedback
- Performance in isolation
- Realistic environment

Functional Exercises (FE)

The Functional Exercise, also known as a Command Post Exercise (CPX), is designed to test and evaluate individual capabilities, multiple functions or activities within a function, or interdependent groups of functions. Functional exercises generally focus on exercising the plans, policies, procedures, and staffs of the direction and control nodes of the Incident Command System (ICS) and Unified Command. Generally, incidents are projected through an exercise scenario with event updates that drive activity at the management level. Movement of personnel and equipment is simulated.

The objective of the Functional Exercise is to execute specific plans and procedures and apply established policies, plans, and procedures under crisis conditions, within or by particular function teams. A functional exercise simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment. Attributes of a functional exercise include the following:

- Evaluating EOC, headquarters, and staff
- Evaluating functions
- Examining inter-jurisdictional relationships
- Measuring resource adequacy
- Reinforcing established policies and procedures

Full Scale Exercises (FSE)

FSEs are multiagency, multi-jurisdictional exercises that test many facets of emergency response and recovery. They include many first responders operating under the ICS or Unified Command to effectively and efficiently respond to and recover from an incident. An FSE focuses on implementing and analyzing the plans, policies, and procedures developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. The events are projected through a scripted exercise scenario with built-in flexibility to allow updates to drive activity. It is conducted in a real-time, stressful environment that closely mirrors a real incident. First responders and resources are mobilized and deployed to the scene where they conduct their actions as if a real incident had occurred (with minor exceptions). The FSE simulates the reality of operations in multiple functional areas by presenting complex and realistic problems requiring critical thinking, rapid problem solving, and effective responses by trained personnel in a highly stressful environment. Other entities that are not involved in the exercise, but that would be involved in an actual incident, should be instructed not to respond.

An FSE provides an opportunity to execute plans, procedures, and MAAs in response to a simulated live incident in a highly stressful environment. Typical FSE attributes include the following:

- Activating personnel and equipment
- Allocating resources and personnel
- Analyzing memorandums of understanding (MOUs), SOPs, plans, policies, and procedures
- Assessing equipment capabilities
- Assessing inter-jurisdictional cooperation
- Assessing organizational and individual performance
- demonstrating interagency cooperation
- Exercising public information systems
- Testing communications systems and procedures

The level of support needed to conduct an FSE is greater than needed for other types of exercises. The exercise site is usually extensive with complex site logistics. Food and water must be supplied to participants and volunteers. Safety issues, including those surrounding the use of props and special effects, must be monitored.

FSE controllers ensure that participants' behavior remains within predefined boundaries. Simulation Cell (SimCell) controllers continuously inject scenario elements to simulate real events. Evaluators observe behaviors and compare them against established plans, policies, procedures, and standard practices (if applicable). Safety controllers ensure all activity is executed within a safe environment.