Exercise Development

A start to finish guide

THE PLANNING PROCESS

The Planning Process
Yearly Tasks before starting the planning process

■ Conduct a local Integrated Preparedness Planning Workshop (IPPW)

- *Review exercise program guidance; such as, Integrated Preparedness Plan (IPP)*

- *Involve local appointed and elected officials to gather input on exercise priorities*

- *Review existing plans, policies, and procedures*

- *Review the jurisdictions risk, threat, and hazard assessment*

- *Review local improvement plan/improvement plan matrix*

- *Review past After-Action Reports (AARs) to see what corrected areas for improvement need to be retested*

- *Review past training deficient areas*

The Planning Process
Timeline for completing the planning process

- Determine Concept & Objective (C&O) : 5-7 months before the exercise

- Initial Design: 5-7 months before the exercise

- Follow-up Design Tasks : 3 months before the exercise

- Final Planning: 4-6 weeks before the exercise

- Print all exercise documentation: week of the exercise

The Planning Process
Concept & Objective (C&O) determination

- Identify the plan you want to test

  - *Use the information from your IPPW to help determine this*

- Choose the parts of the plan to test in your exercise

  - *Use the information from your IPPW to help determine this*

- Identify who should be part of your planning team based on what you are testing

  - *This may be just you as the coordinator*

  - *Identify the lead planner if utilizing a planning team*

  - *Consider involving relevant subject matter experts and local decision makers who will not be participants in the exercise.*

- Decide when to meet to work on the initial design of the exercise

  - *If you are the sole planner set a date to begin working on the initial design (Tip: schedule yourself a meeting and mark your calendar as busy to ensure you meet this deadline)*

The Planning Process
Initial Design Steps

- Draft SMART Objectives that focus on what you want to test

- Choose the Core Capabilities that aligns with each objective

- Select the Mission Area that aligns with each Core Capability

- Identify the location, scope, and type of exercise needed to test your objectives

- Identify needed agencies/organizations to participate in the exercise

- Identify the needed exercise documentation

- Set a schedule for finalization of the above drafts/tasks

The Planning Process
Initial Design Steps

■ Outline evaluation requirements - for example, utilizing Exercise Evaluation Guides (EEGs)

■ Begin scenario development

■ Assign tasks to individuals on the planning team with due dates

   – *If you are the sole planner prioritize tasks and set goal dates to complete each task*

The Planning Process
Tasks Following Initial Design

- Work on assigned planning task such as:

  - *Exercise scope, objectives, core capabilities, EEGs with critical tasks*

- Coordinate with other planning members (in person or by zoom, email, phone, etc. as needed)

  - *Schedule follow up meetings to complete the planning process*

  - *Set goal dates for completing tasks*

- Send an exercise invitation to the identified participating agencies/organizations so they can be aware of their role ahead of the exercise

  - *Ex: Player, Observer, Evaluator, Controller, Etc.*

The Planning Process
Tasks Cont.

- Review and finalize drafted exercise materials completed since the initial development

- Build the scenario timeline

- Review the Exercise Plan (ExPlan), or Situation Manual (SitMan) template and assign for completion

- Develop the Facilitator's Guide or Controller/Evaluator Handbook (If needed)

- Review the Exercise Evaluation Guides (EEGs) to make sure they align with the objectives to be tested

- Begin drafting the Master Scenario Events List (MSEL) and the Participant Feedback Form

- Fill out a notification form and submit it to ADEM Exercise

The Planning Process
Final Planning Review

■ Review and finalize the scenario timeline

■ Review and finalize the following:

- *ExPlan or SitMan*

- *Facilitator's Guide or Controller/Evaluator Handbook (if needed)*

- *EEGs*

- *MSEL*

- *Participant Feedback Forms*

- *Exercise multimedia presentation(s)*

■ Confirm the exercise date, time, & location

■ Ensure all planning members know these details

S.M.A.R.T. OBJECTIVES

What are S.M.A.R.T. Objectives and how do I write them?

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

■ S.M.A.R.T. is an acronym used to identify the characteristics of good objectives. S.M.A.R.T. objectives identify who should do what, under what conditions, according to which standards.

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

- ■ S.M.A.R.T. objectives are:
  - *Specific*
  - *Measurable*
  - *Achievable*
  - *Relevant*
  - *Time-bound*

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

- **Specific:** The objective specifies what needs to be done with a timeline for completion
  - *Objectives should address the five W's:*
    - Who?
    - What?
    - When?
    - Where?
    - Why?

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

- **Measurable**: Objectives should include numeric or descriptive measures that define:
  - *Quantity*
  - *Quality*
  - *Cost*
  - *Pass/Fail (for example, "Test our ability to _____")*

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

- **Measurable Cont.:**
  - *Pass/Fail cont.*
    - Did you complete the objective? Did you fail to complete the objective?
      - *For example, if you completed the task but did not meet the set time frame this would be a fail, using this unit of measurement, and would be explained further in the improvement plan.*
  - *The focus should be on observable actions and outcomes*

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

- **Achievable**: Objectives should be within the control, influence, and resources of exercise play and participant actions

- Objectives should be realistic goals or tasks based your local plans, policies, etc. and your jurisdictional capabilities

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

- **Relevant**: Objectives should be instrumental to the mission of the organization and link to its goals or strategic intent.

- Objectives should be written based on local plans, policies, procedures, guidelines, etc.

S.M.A.R.T. Objectives
What are S.M.A.R.T. Objectives?

- **Time-Bound**: A specified and reasonable timeframe should be incorporated into all objectives – two examples are listed below:

    - In a TTX, drill, functional, or full-scale exercise: "within the first hour" or "within the first week"

    - In a real-world event or workshop: "as soon as possible" (document when completion of the task was achieved and consider listing this as a strength or area for improvement)

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

- Determine what you want to test

- Write your objective to test this aspect of your plan, policy, etc.

  - *Include the S.M.A.R.T. components*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

- Republic City OEM will test our ability to establish emergency sheltering, food, and hydration support, for up to 25% of people in our county, at the county fair grounds, within the first 72 hours following the onset of the event. We will utilize our existing mass care plans and reach out to our partners to provide these services throughout the response to the event.

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions:

- What goal am I trying to achieve?

- Why am I trying to achieve this goal?

- Who is going to achieve this goal?

- When (within what time frame) is the goal going to be achieved?

- Where is this goal going to be achieved? (for example, "in _____ County" or "at the County courthouse, fairgrounds, EOC, etc.")

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

■ How is this goal going to be achieved?

■ How will I measure or determine if this goal is achieved?

■ What is the time-frame for achieving/maintaining this goal?

(For the first hour/week/month, throughout the event, etc.)

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

- What goal am I trying to achieve?
  - *Establish emergency sheltering, food, and hydration*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

■ Why am I trying to achieve this goal?

– *To provide support for people in our county*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

- Who is going to achieve this goal?
    - *Republic City OEM*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

■ When (within what time frame) is the goal going to be achieved?

  – *Within the first 72 hours following the onset of the event*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

- Where is this goal going to be achieved? (for example, "in _____ County" or "at the County courthouse, fairgrounds, EOC, etc.")
  - *At the county fair grounds*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

- How is this goal going to be achieved?
  - *We will utilize our existing mass care plans and reach out to our partners to provide these services*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

- How will I measure or determine if this goal is achieved?
  - *We'll test our ability to (pass or fail; we will complete the task or we won't)*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

Ask the following questions continued:

- What is the time-frame for achieving/maintaining this goal? (For the first hour/week/month, throughout the event, etc.)
  - *Throughout the response to the event*

S.M.A.R.T. Objectives
How do I write a S.M.A.R.T. Objective?

- Compile your answers to the questions into a sentence
  - *The order does not matter, list them in a clear and logical manner*

- Republic City OEM will test our ability to establish emergency sheltering, food, and hydration support, for up to 25% of people in our county, at the county fair grounds, within the first 72 hours following the onset of the event. We will utilize our existing mass care plans and reach out to our partners to provide these services throughout the response to the event.

How To Select A Core Capability
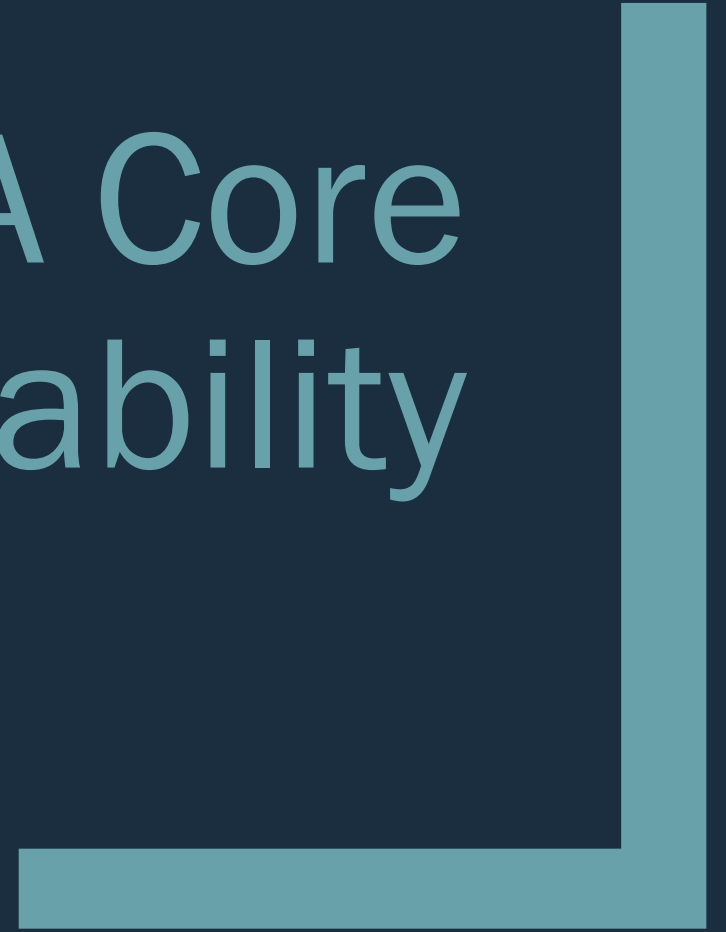
How To Select A Core Capability
Overview – Selecting Core Capabilities

- Selecting a core capability is the responsibility of each local coordinator based on your operating procedures

- There are three options outlined in this guide to assist you with the process of selecting a core capability for your exercise:
  - *Start with the objective*
  - *Start with a core capability*
  - *Start with a mission area*

How To Select A Core Capability
Option #1 – Starting with the Objective

■ *After reviewing/updating and training on your plan(s):*

– *Determine what portion(s) of your plan needs to be tested*

– *Write S.M.A.R.T objectives based on this portion of the plan(s)*

– *Select the appropriate core capability that aligns with this objective*

– *Identify the mission area that corresponds with the core capability*

How To Select A Core Capability
Option #2 – Starting with a Core Capability

- Identify core capabilities you would like to test in conjunction with your plan
  - *Identify the mission area that corresponds with the selected core capability.*

- *After reviewing/updating and training on your plans related to the core capability:*
  - *Design an exercise that tests your jurisdictions' proficiency of the core capability*
  - *Write S.M.A.R.T objectives based on your plan and the core capability*

How To Select A Core Capability
Option #3 – Starting with a Mission Area

- *Select a mission area you would like to test*

- *Review your plan(s) for sections relevant to the mission area then follow the steps in option #1*

- *OR: Select a core capability relevant to the mission area then follow the steps in option number #2**

*If using this method we recommend using FEMA's "Core Capability Development Sheets" as a resource.

HOW TO DEVELOP AN EXERCISE EVALUATION GUIDE

What is an Exercise Evaluation Guide (EEG) and how to develop one?

How To Develop an EEG
What is an EEG and what is its purpose?

"Exercise evaluation is the cornerstone of an exercise and maintains the functional link between exercise and improvement planning.

Through exercise evaluation, organizations assess the capabilities needed to accomplish a mission, function, or objective.

Effective exercise evaluation involves planning for exercise evaluation, observing and collecting data during exercise conduct, analyzing data, and reporting exercise outcomes." ("Prep. Tool Kit", n.d., para. 1)

How To Develop an EEG
What is an EEG and what is its purpose?

- A guide for the exercise evaluator to follow
  - *Form or Template*
- Structured to capture specific information
- Developed by the Exercise Planning Team
- Documents:
  - *Core Capabilities*
  - *Capability Targets*
  - *Critical Tasks*
  - *Performance Ratings*

How To Develop an EEG
What is an EEG and what is its purpose?

- *"EEGs are designed to accomplish several goals:*
  - *Streamline data collection*
  - *Enable thorough assessments of the participant organizations' capability targets*
  - *Support development of the After-Action Report*
  - *Provide a consistent process for assessing preparedness through exercises*
  - *Help organizations map exercise results to exercise objectives, core capabilities, capability targets, and critical tasks for further analysis and assessment " ("Prep. Tool Kit", n.d., para 1)*

How To Develop an EEG
What is a Core Capability?

- Established in the National Preparedness Goal:
  - "*A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.*" ("FEMA", 2020, para. 1)
- Referenced in the National Planning Frameworks

How To Develop an EEG
What is a Core Capability?

- Grouped across five mission areas:
  - *Prevention*
  - *Protection*
  - *Mitigation*
  - *Response*
  - *Recovery*

  Some are grouped within one mission area while others are grouped in multiple or all mission areas

- [32 Total Core Capabilities](#)
  - *Activities; that address the greatest risk to the nation*
  - *Tied to a capability target*

How To Develop an EEG
What is a Capability Target?

- Sets the upper-limit parameter for the core capability

- Sets a target capability for exercise players to achieve

- Typically written as quantitative or qualitative statements

How To Develop an EEG
What is a Critical Task?

- Specific component required to execute a core capability

- Describes how the capability target will be met

- Typically list the activities, resources, and responsibilities necessary to achieve capability targets

- *"Based on operational plans, policies, and procedures to be exercised and tested during the exercise."* ("EVAL Collecting Data Using EEGs Template 2017 508", 2017.)

How To Develop an EEG
What is a Performance Rating?

- Determines the Capability Level
  - *Full or Partial*

- Four categories set by FEMA to rate the performance level of the Core Capabilities.
  - *Performed without challenges (P) – Full*
  - *Performed with some challenges (S) – Partial*
  - *Performed with major challenges (M) – Partial*
  - *Unable to be performed (U) – Partial*

How To Develop an EEG
What is a Performance Rating?

■ Not a grade; not a reflection of how "good" or "bad" you are

    – *Exercises are meant to find areas for improvement*

    – *"Performed without challenges", (P), is not expected on every core capability*

How To Develop an EEG
Research and Build-out

- **Background Research**

  - *Review selected mission area, core capabilities, objectives, and evaluation requirements (decided by planning team or individual exercise planner)*

  - *Review Capability Gaps*
    - Documented in your threat and hazard assessments, improvement plan (IP) matrix*, and Integrated Preparedness Plan (IPP) - *formerly Training and Exercise Plan*

*The IP matrix contains a compilation of information from your AAR's used to track the completion of corrective actions.

How To Develop an EEG
Research and Build-out

- **Background Research Cont.**

  - *Review Capability Gaps cont.*

    - Discussed in your local Integrated Preparedness Planning Workshop (IPPW)

    - Threat and hazard assessments and the IP matrix are imperative to exercise design and overall emergency preparedness

How To Develop an EEG
Research and Build-out

- ■ **Background Research Cont.**

  - – *Review plans, policies, procedures, and protocols that will be used to identify capability targets and critical tasks that will be exercised and evaluated*

  - – *Review After-Action Reports (AAR's) and Improvement Plans (IP's) to identify capability targets and critical tasks that will be exercised and evaluated*

How To Develop an EEG
Research and Build-out

- **Build-Out**
  - *Decide what template you will use:*
    - FEMA Template
    - ADEM Template (based on FEMA's)
      - *Word or Excel*
    - Local jurisdiction developed template

How To Develop an EEG
Research and Build-out

- **Build-Out Cont.**

  - *Input Basic Information*

    - Name, date, jurisdiction, location, etc. (auto-input for you in the ADEM excel template)

  - *Input Objectives*

  - *Develop Capability Targets*

  - *Identify Critical Tasks*

  - *Review*

How To Develop an EEG
Research and Build-out

- **Build-Out Cont.**
  - *Finalize*

  - *Coordinate*

    - Share drafts and final versions with planning team members

    - Share final versions with evaluators (if not on the planning team) prior to exercise conduct to allow them to review, ask questions, and familiarize themselves with the guide

MASTER SCENARIO EVENT LIST (MSEL)

What is a MSEL and how do I develop one?

What is a MSEL?

■ The Master Scenario Events List (MSEL) is a chronological timeline of scripted events or questions that drive an exercise

   – *Prompts certain exercise player responses*

   – *Ensures that necessary events happen to test exercise objectives*

What is a MSEL?

- A simulation cell (SimCell) utilizes the MSEL to deliver exercise injects or to simulate participation by individuals or agencies that may not be participating in the exercise

  – *Operations Based Exercise*

- A facilitator utilized the MSEL to ask a series of questions that are intended to be asked to participants during an exercise

  – *Discussion Based Exercise*

- The MSEL may be developed using any desired format as long as key information is presented

  – *The State of Arkansas uses an Excel MSEL Template for exercises*

Contents of a MSEL

- The basic information needed for a successful MSEL:
  - *What type of inject is it? (For example: For Your Information (FYI), Request for Information (RFI), Request for Assistance (RFA), Declaration (DEC), or a Question (for discussion based exercises)*
  - *Be sure to start and end each inject with "This is an exercise" or "Exercise Exercise Exercise"*
    - This helps eliminate confusion in determining if this is a real-world event or an exercise inject

Contents of a MSEL

■ The basic information needed for a successful MSEL continued:

– *The agency name that is calling in the inject*

– *The time the inject should be called in*

– *A section for the controller to make notes on a specific inject if needed*

Types of Injects

- **FYI – For Your Information**
  - *This is used to relay information to the exercise participants that does not contain a request for assistance, request for information, or a disaster declaration*
  - *May contain calls for the Public Information Officer (PIO).*
    - PIO calls may be labeled as FYIs, PIO, Media, etc. on the MSEL
  - *A MSEL may contain numerous FYIs to drive the exercise*

Types of Injects

- RFI – Request for Information
  - *This is used when information is requested by an individual or agency*
  - *The EOC is contacted and they notify the agency/person that will be able to best address the information request*
  - *RFIs may be used as little or often in the exercise to tests desired objectives*

Types of Injects

- ■ RFA – Request for Assistance
  - *An RFA is used to request resources from local, state, or federal partners that a jurisdiction may need to respond to the event*
  - *A MSEL may contain numerous RFAs*

Types of Injects

- DEC – Declaration
  - *This is used when a disaster declaration is made by the Chief Elected Official of a jurisdiction*
    - A verbal declaration is required before a jurisdiction may seek assistance from state or federal partners
    - Only one declaration inject is required for requesting assistance from the state

Types of Injects

- ■ Question
  - – *This is used to present topics and facilitate conversation during a discussion based exercise*
    - ■ Questions in the MSEL should align with the EEG by facilitating discussions that address the critical tasks and meet the objectives outlined in the EEG

How to deliver the exercise injects

- Exercise injects may be delivered by any available and reasonable means the planning team choose

- Multiple delivery methods may be used during the exercise
  - *Examples of delivery methods include:*
    - Phone
    - Email
    - Radio
    - Amateur radio (ham radio)
    - Satellite Phone
    - Hand delivered

Tips for writing a successful MSEL

- Make sure the MSEL follows the scenario and drives the exercise towards testing the identified exercise objectives
- Have a reasonable time line established with the injects to pace the exercise at a beneficial rate
  - *A controller may pause or speed up the exercise to keep it flowing without overloading players or having to much idle time during the exercise*
  - *Have a good mix of inject types through the exercise*

Tips for writing a successful MSEL

- Determine the length of your exercise to help figure out the number of injects needed
  - *For example: You determine that the exercise will run for two hours. You decide to pace the injects at one inject delivered every 5 minutes. This means that you need a minimum of 24 injects to meet that timeline.*
    - Be sure to write additional injects incase they are needed to speed up the exercise flow
    - Do not include PIO injects as part of the main exercise injects total since those do not require multiple player involvement

Tips for writing a successful MSEL

- Have the planning team review the MSEL draft for the following:
  - *The timeline flows smoothly and events happen in the proper order*
  - *An appropriate number of injects are available to drive the exercise for the identified time period*
  - *Any confusion in language or content is clarified and the inject is corrected*
  - *The injects are plausible and not out of the exercise scope*

Tips for writing a successful MSEL

- Have the planning team review the MSEL draft for the following continued:
  - *There is a good mix in the various types of injects through the MSEL*
  - *The delivery method for the inject is appropriate. (For example: an inject isn't called in using a phone when previously reported phone service was out in the area)*
  - *Anticipate possible contingency injects to make a key process or action occur incase it is not happening at a reasonable pace during the exercise.*

IMPROVEMENT PLANNING

Improvement Planning
Planning to Improve

■ Improvement Planning starts with exercise design

 – *Write an evaluation guide (EEG) that will capture pertinent information*

 – *Select (or train) evaluators who can proficiently observe players and properly document outcomes in the EEG*

■ After conducting an exercise be sure to complete the hot wash

 – *Designate one or more person to document the discussion*

 – *Following the group hot wash conduct a brief evaluator/controller meeting where you can discuss the exercise and review the EEGs to ensure they are complete and ask any clarifying questions*

Improvement Planning
Planning to Improve

■ Compile all hot wash notes and EEGs

■ Fill out the AAR

  – *The improvement plan in your AAR should include any and all relevant information from EEGs and hot wash notes*

Improvement Planning
A Master Improvement Plan

- Develop a master Improvement Plan (IP) or Improvement Plan Matrix (IP Matrix).
    - *A single document that summarizes the AAR's from all previous exercise and real-world events for efficient review of improvement needs*
    - *Decide what format you want your IP or IP Matrix in and develop it*
        - Narrative style, word doc, excel table, etc.

Improvement Planning
A Master Improvement Plan

- Here is a sample of the IP Matrix ADEM uses; this example is filled in with information from the Sample AAR on the ADEM website (this example does not include the ADEM cover page)

Improvement Planning
A Master Improvement Plan

- After completing each AAR fill out the master IP or IP Matrix with the information in your AAR/IP
  - *Update your master IP or IP Matrix regularly*
    - Completion of corrective action
    - Change of corrective action
    - Status change in corrective action process
    - Change of point of contact

Improvement Planning
Tips for developing an IP/IP Matrix.

■ Should include, at a minimum:
- *Core Capability*
- *Area for improvement*
- *Corrective action*
- *Point of contact*
- *Start date*
- *Actual completion date*

Improvement Planning
Tips for developing an IP/IP Matrix.

- Other elements to consider including:
  - *Exercise name*
  - *Exercise conduct date(s)*
  - *Objective*
  - *Analysis (brief sentence; how the area for improvement prevented a full capability)*
  - *Reference*
  - *Capability element*

Improvement Planning
Tips for developing an IP/IP Matrix.

- Other elements to consider including continued:

  - *Primary responsible organization*

  - *Projected completion date*

  - *Section for additional comments*

  - *Section for initialing once completed*

Improvement Planning
Tips for developing an IP/IP Matrix.

- Consider using color coding to track corrective action status

    - *For example, Not started, in progress, complete, overdue, pending.*

- Determine a prioritization guide for completing corrective actions

- Include a cover/instruction sheet

    - *Good reminder for you; continuity in the event you are unavailable*

    - *Can include the legend for the color coding (if relevant)*

    - *Can include the prioritization guide (if relevant)*

Improvement Planning
Tips for developing an IP/IP Matrix.

- Select dates and set calendar reminders to review the IP or IP Matrix quarterly and complete a master review yearly

- Don't forget to follow these steps and include information from real-world events

  - *Completing an AAR for real-world events and adding the information to your IP or IP Matrix is imperative to ensuring your local jurisdiction is prepared*

THE END

The following slides contain links to helpful resources, contact information for the exercise branch, and citations for this PowerPoint.

Resources

- https://preptoolkit.fema.gov/web/hseep-resources
  - *Information and templates from FEMA can be accessed at the link above*

- https://www.dps.arkansas.gov/emergency-management/adem/training-exercise/exercise/
  - *Information, trainings, and templates can be accessed at the link above*

- FEMA HSEEP - 2020 Revision

Contact Info

- Chris Foreman – Training and Exercise Branch Manager

- Jessica Romine – Administration

- Rebekah Magnus – Exercise Officer

- Jason Phillips – Exercise Officer

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501-683-6700

Citation

- https://www.fema.gov/emergency-managers/national-preparedness/goal

- https://www.fema.gov/emergency-managers/national-preparedness/mission-core-capabilities