FAIRFAX COUNTY

PRE-DISASTER RECOVERY PLAN TABLETOP EXERCISE

Feb. 10, 2012

AFTER ACTION REPORT / IMPROVEMENT PLAN

Publication Date:

March 21, 2012

This page is intentionally blank.

HANDLING INSTRUCTIONS

1. The title of this document is Feb. 10, 2012 Fairfax County Pre-Disaster Recovery Plan Tabletop Exercise After Action Report (PDRP TTX AAR.)

2. Information gathered in this AAR is designated as unclassified.

3. At a minimum, the attached materials will be disseminated strictly on a need-to-know basis and, when unattended, will be stored in a locked container or area that offers sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.

4. Point of Contact:

   Fairfax County Emergency Planner:

   Amanda Phan
   Emergency Planner
   Fairfax County Office of Emergency Management
   MPSTOC – 4890 Alliance Dr.
   Fairfax, VA 22030
   (571) 350-1010 (office)
   Amanda.phan@fairfaxcounty.gov

   Fairfax County Exercise Director:

   Michael Guditus
   Training & Exercise Director
   Fairfax County Office of Emergency Management
   MPSTOC – 4890 Alliance Dr.
   Fairfax, VA 22030
   (571) 350-1011 (office)
   Michael.Guditus@fairfaxcounty.gov

This page is intentionally blank.

CONTENTS

Handling Instructions 1
Contents 3

Executive Summary 5
Section 1: Exercise Overview 7
Section 2: Exercise Summary 8
Section 3: Analysis of Objectives 13
Section 4: Conclusion 16

Appendix A: Improvement Plan 17
Appendix B: Acronyms 23
Appendix C: Participant Feedback Analysis 24
Appendix D: Participant Feedback Form 32
Appendix E: TTX Evaluation 34
Appendix F: Additional Resources Identified 37
Appendix G: 3-Up/ 3-Down Assessment 39

This page is intentionally blank.

EXECUTIVE SUMMARY

The Fairfax County, Va., Fairfax County Pre-Disaster Recovery Plan (PDRP) Tabletop Exercise (TTX) After Action Report (AAR) was developed to capture the county's performance during this exercise.

More precisely, this report identifies strengths to be maintained, potential areas for improvement, and supports tracking the progress of corrective actions via the Improvement Plan (IP) and the county's Corrective Action Program (CAP).

Major Strengths

Overall, this exercise can be considered a significant success. Although there is opportunity for future training and enhancements to the PDRP, all exercise objectives were met (see Appendix E, TTX Evaluation). Additionally, quantitative feedback from players, observers, facilitators, and evaluators rated the outcomes on average between 4.1 and 4.6 (out of 5.0) for all criteria related to exercise design and execution (see Appendix C, Participant Feedback).

In terms of the exercise's objectives, the following general areas were cited as major strengths by many participants (see Tables C.2, E.2, G.1):

- Overall familiarity with the PDRP was clearly enhanced by this TTX, and participants were able to provide meaningful and specific areas for both enhancing the document and supporting it through additional plans, policies and procedures.
- The exercise was also successful in bringing together participants (various county agencies as well as private and non-profit sector partners) who may have had limited exposure previously, thus providing the groundwork for future partnerships.

In terms of exercise design and execution, the following general areas were cited as major strengths by many participants (see Tables C.2, E.2, G.1):

- The structure and delivery of the exercise was positively commented upon numerous times, including the quality of the facilitators, the read-aheads and hand-outs, and the overall discussions.
- The scenario itself was considered to be well-designed – enough to force players out of their comfort zones, but not so catastrophic as to overwhelm or paralyze them.

Primary Areas for Improvement

This TTX was intended both to train and orient participants to the PDRP, and to identify opportunities to enhance the document and support it through additional plans, policies and procedures. The TTX accomplished this.

In terms of the exercise's objectives, the following general areas were cited as areas for potential improvement by many participants (see Tables C.3, C.4, E.2, G.2):

- Specific identified opportunities for improving the PDRP and supporting it through additional plans, policies and procedures can be found in Appendix B (Improvement Plan), and in Tables C.4, C.5, and F.1.

- Participants also identified the opportunity for additional clarity in the PDRP in several specific areas, and evaluators pointed to *some* players' reluctance to engage the document until late in the TTX.
- Evaluators pointed to the need for additional training on basic Incident Command Systems (ICS) concepts.
- Participants broadly agreed that additional recovery exercises (at the department, Recovery Support Function Branch, and county-wide levels) would be beneficial, including incorporating recovery issues into *non-recovery* exercises.
- Many players also identified the opportunity for additional outreach and involvement, esp. from private-sector partners, community groups, and federal agencies.

In terms of exercise design and execution, the following general areas were cited as areas for potential improvement by many participants (see Tables C.3, C.4, E.2, G.2):

- Many participants felt that the exercise had too much content, and/or was rushed.
- Also, although many participants appreciated the clarity and amount of read-aheads and hand-outs, others felt overwhelmed by them (and the time-constraints on reviewing them).
- Some participants also proposed that the realism of the simulation would have been enhanced by greater ability (or encouragement) for interaction among the break-out groups, and by greater use of (and player access to) subject-matter experts (SMEs).

SECTION 1: EXERCISE OVERVIEW

Exercise Details

Name of Exercise

Fairfax County Pre-Disaster Recovery Plan Tabletop Exercise

Type of Exercise

Tabletop

Start/ End Date

Feb. 10. 2012

Duration

Six hours (0900-1500)

Location

Fairfax County, Va. MPSTOC (EOC)

Scenario Type

Recovery from radiological dispersal device (RDD) detonation

Exercise Planning Team

Marc Barbiere, Fairfax Co. Health Dept.
Craig Buckley, Fairfax Co. Fire & Rescue Dept.
Aldo Davila, Fairfax Co. OEM
Michael Guditus, Fairfax Co. OEM
David McKernan, Fairfax Co. OEM
Amanda Phan, Fairfax Co. OEM

Hal Cohen, Witt Associates
Tracy Friend, Witt Associates

SECTION 2: EXERCISE SUMMARY

The below presents a summary of the Fairfax County PDRP TTX. For additional detail on exercise design or on the scenario, refer to the Fairfax County PDRP TTX Situation Manual (SITMAN).

Background

In 2009, Fairfax County began creation of its Pre-Disaster Recovery Plan in conjunction with private, nonprofit, local, state and regional stakeholders. This plan incorporates the entities that would be involved in recovery if and when a major disaster strikes. It establishes roles and responsibilities for disaster recovery operations and sets in place structure for long term recovery to establish Fairfax County back to "a new normal."

An attack involving the release of radiation would create uncertainty, fear, and terror. Radiation – an invisible, odorless, and poorly understood threat – has been a cause of extreme public anxiety in the past, as demonstrated by the public's response to the Three Mile Island, Chernobyl and Goiânia, Brazil accidents.

This exercise was designed to test the effectiveness of the PDRP using the scenario of a radioactive isotope (Cesium-137), which is commonly found in medical therapy and other industrial sources – and that can be turned into a weapon.

County departments and agencies, as well as external stakeholders, had the opportunity to discuss the effects on the County, what recovery actions were necessary, and how to transfer from response to recovery in an efficient, organized manner to best provide for the residents of Fairfax County.

This tabletop exercise was the final stage in the planning and creation of the Pre-Disaster Recovery Plan (2012).

Purpose

The purpose of this exercise was to provide participants with an opportunity to become familiar with the PDRP both as an organizational tool and as a high-level operational guide, evaluate current recovery concepts, and identify opportunities to enhance planning for recovery from a major disaster in Fairfax County.

The exercise focused on:

- Review of PDRP
- Staffing and structure of a county Recovery Agency
- Transition into recovery from response, and
- The process of development and prioritization of strategies to develop a Recovery Action Plan

Scope

This exercise emphasized the role and capabilities of the newly created PDRP for Fairfax County, Virginia and participating partners. Focus was on high-level decisions and organization to fully prepare Fairfax County for recovery from whatever major disaster may disrupt lives and businesses.

Target Capabilities

The National Planning Scenarios and establishment of the National Preparedness Priorities have steered the focus of homeland security toward a capabilities-based planning approach. Capabilities-based planning focuses on planning under uncertainty because the next danger or disaster can never be forecast with complete accuracy. Therefore, capabilities-based planning takes an all-hazards approach to planning and preparation that builds capabilities that can be applied to a wide variety of incidents.

States and urban areas use capabilities-based planning to identify a baseline assessment of their homeland security efforts by comparing their current capabilities against the Target Capabilities List (TCL) and the critical tasks of the Universal Task List (UTL). This approach identifies gaps in current capabilities and focuses efforts on identifying and developing priority capabilities and tasks for the jurisdiction. These priority capabilities are articulated in the Fairfax County homeland security strategy and Multiyear Training and Exercise Plan, of which this exercise is a component.

The capabilities listed here were selected by the Fairfax County PDRP TTX Exercise Planning Team from the priority capabilities, consistent with Fairfax County's Multiyear Training and Exercise Plan. These capabilities provide the foundation for development of the exercise design objectives and scenario. The purpose of this exercise is to measure and validate performance of these capabilities and their associated critical tasks.

The selected target capabilities were:

- Structural Damage Assessment
- Restoration of Lifelines
- Economic and Community Recovery

The primary intent of this TTX was orientation and familiarity with the PDRP, and the "road-testing" of the Plan itself. Therefore, the Exercise Objectives (see following section) are of greater specific relevance to the design and evaluation of this TTX than the Target Capabilities.

Exercise Objectives

Exercise objectives were to improve understanding of recovery and the PDRP, identify opportunities or problems, increase understanding of recovery operations and processes, and implement plan improvements.

This exercise focused on the following objectives, selected by the Exercise Planning Team:

1. The PDRP was reviewed at the beginning of each module, to brief all participants of their general roles and responsibilities.
2. Given a specific scenario, participants (starting from within the EOC Recovery Branch) were to establish the structure and staffing for the Recovery Agency.
3. Using the PDRP as a guide, participants were to discuss how the county transitions its organization and operations from response to recovery.
4. Each branch was to discuss how the scenario affects it, and develop recommended strategies and actions, as well as identify potential roadblocks.
5. The command and general staff was to work with Branches to prioritize proposed strategies and actions, in order to develop a Recovery Action Plan (RAP).

In addition, the TTX intended to elicit feedback regarding additional plans, policies, and procedures that may be necessary for successful PDRP implementation; potential improvements to the PDRP document itself; and potential specialized training needed for some staff.

Participants

This exercise following types of participants were involved in the execution of this TTX in various ways, as described:

- Players responded to the situation presented, based on knowledge of response procedures, current plans and procedures, and insights derived from training.
- Observers supported the group in developing responses to the situation during the discussion; they were not participants in the moderated discussion.
- Facilitators provided situation updates and additional information as required, and facilitated break-out groups
- Evaluators documented completion of TTX objectives.
- SMEs had technical knowledge to provide additional information or resolve questions as required. They variously participated as evaluators, facilitators, players, or observers.

Exercise Structure

This TTX was a multimedia, facilitated exercise. Modules were loosely based on the simulated timeline, as follows. Players participated in the following three modules, which integrated the TTX objectives as shown:

- Module 1 (Days 5-7)
  - Objective 1: Review PDRP
  - Objective 2: Establish Recovery Agency Structure

- Module 2 (Weeks 3-4)
  - Objective 1: Review PDRP
  - Objective 3: Transition from response to recovery

- Module 3 (Month 6 and beyond)
  - Objective 1: Review PDRP
  - Objective 4: Branch-level impacts, needs, strategies/actions
  - Objective 5: Develop RAP

Each module began with a multimedia update that summarized key events occurring within that time period. After the updates, participants reviewed the situation and engaged in functional group discussions of appropriate response issues.

The participants were broken out into eight discussion groups, as shown below.

1. Command and General Staff
2. Community Recovery Planning Recovery Support Function (RSF) Branch
3. Community Services RSF Branch
4. Economic Recovery RSF Branch
5. Housing RSF Branch
6. Infrastructure RSF Branch
7. Natural and Cultural Resources RSF Branch
8. Public Safety RSF Branch

After each break-out group discussion, participants engaged in a facilitated caucus discussion in which a spokesperson from each group presented a synopsis of the group's actions, based on the scenario.

Exercise Guidelines

Players were presented the following guidance for participation in the TTX:

- This TTX was be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, were expected.
- Players responded on the basis of their knowledge of current plans and capabilities and insights derived from training.
- Players were to refer to the PDRP for guidance.
- Decisions were not precedent setting and may not reflect an organization's final position on a given issue. This exercise was an opportunity to discuss and present multiple options and possible solutions through the workings of the PDRP.
- Issue identification was not as valuable as suggestions and recommended actions that could improve response and preparedness efforts. Problem-solving efforts were the focus.
- All players were expected to: assess PDRP concepts and processes for viability, participate in group discussions, and assist in preparing group reports

Assumptions and Artificialities

Players were informed of the following assumptions and artificialities built into the TTX:

- The scenario was plausible, and events occurred as they were presented.

- There was no hidden agenda, and there were no trick questions.
- All players received information at the same time.
- Communication between groups was unrestricted and was encouraged during the exercise.
- Participants could assume that all Federal, State, and local responders were initiating their plans, procedures, and protocols.
- Not all aspects of recovery (or response) would be discussed during the exercise.

SECTION 3: ANALYSIS OF OBJECTIVES

This section of the report reviews participants' performance in relation to the tabletop exercise. In this section, tasks are organized by objective. The objectives are followed by related observations, which include references, analysis, and recommendations.

It should be noted that the exercise did not require completion of all EEG tasks. Therefore, some tasks were rated as "n/a" by the evaluators. Tasks rated thusly are not included in the below discussion. All tasks discussed below relate to topics discussed by the break-out groups; in reference to those tasks, evaluators noted whether the break-out group "fully completed," "partially completed" or did "not complete" a given task.

However, it should be noted that even within tasks that were evaluated (i.e., not rated "n/a"), some participants' sense of being rushed or overwhelmed may have contributed to some "partially completed" or did "not complete" ratings. As noted above, the intent of this TTX was to test the PDRP and the overall readiness of the county to implement it. Therefore, evaluations indicating areas for performance should not be understood to reflect poorly on participants, but rather to indicate areas for improvement to the PDRP document to or supporting program(s) and/or trainings.

OBJECTIVE 1 (EEG tasks: 1.2-3, 2.1-2, 3.1-2 – see Appendix E): "Review the PDRP at the beginning of each module of the TTX to remind all participants of their general roles and responsibilities."

Observations:

The majority of break out groups successfully navigated the PDRP and reviewed the document after each scenario module was introduced, and relevant elements of the Plan pointed to via the "cheat sheet" hand-out.

The majority of break-out groups reported four of six relevant tasks as "fully completed." In the other two tasks – 2.2 and 2.3, "Players used the plan to help formulate responses to the scenario" in Modules 2 and 3 – group performance was evenly split between "fully completed" and "partially completed." One evaluator who gave a "partially completed" commented, "Group did not recognize need to refer to the PDRP; needed to be prompted"; others noted similar issues.

OBJECTIVE 2 (EEG Tasks: 1.5-6 – see Appendix E): "Given a specific scenario, participants (starting from within the EOC Recovery Branch) will establish the structure and staffing for the Recovery Agency, including command and general staff positions, down to the Branch Director level."

Observations:

Players performed very well against the evaluation criteria associated with this Objective. A large majority of break-out groups "fully completed" them, according to the evaluators.

The Command and General Staff group determined that under Emergency Support Function (ESF)-14 a recovery agency should be activated immediately due to the long-term aspect of the recovery process in this scenario. Separately, all recovery branches also determined the need for activation of their branches; this decision was reached with little assistance from break-out facilitators.

OBJECTIVE 3 (EEG Tasks: 2.4-7 – see Appendix E): "Using the PDRP as a guide, participants will discuss how the county will transition its organization and operations from the response to the recovery phase."

Observations:

The recovery branches had a variable amount of success using the PDRP to transition from response to recovery phases. Of the two tasks relevant to the RSF branch break-out groups, all evaluators rated their groups at "fully completed" on one (2.6, which group(s) to activate, and who should be the Lead Agency). However, less than half of groups "fully completed" the other task (2.7, when to transition from response to recovery); the same amount "partially completed" it; and one group was rated "not completed."

Evaluators noted that a number of the RSF branch break-outs had difficulty using the PDRP, and instead relied on the previous experience of their members. Some evaluators noted break-outs were "uncertain" how their RSF Branches fit into the operation; limited knowledge of ICS (i.e., branches and groups) also cited as a contributor to this issue.

Command and General Staff discussed in depth the redeployment of staff from response to recovery as well as day to day operations and the shifting roles of agencies (their evaluator rated them "partially completed" on both tasks).

OBJECTIVE 4 (EEG Tasks: 1.7, 3.4-8 – see Appendix E): "Each branch will discuss how the scenario affects it, and will report to the group as a whole regarding their recommended strategies and actions, as well as potential roadblocks."

Observations:

Recovery branch groups developed objectives for their individual branches; however discussion about additional resources and future challenges was lagging. Few groups fully completed these tasks.

There were six tasks that evaluators looked at in association with this Objective. Participants scored well – almost all groups rated "fully completed" – on tasks 3.5 (describing external relations) and 3.6 (developing three recovery objectives). Many groups noted insufficient time to fully reckon with discussions of pre-event objectives (1.7), additional resource needs (3.7) and potential challenges (3.8), and evaluators notes that more than half of groups only "partially completed" these tasks; a few rated "not completed." A lack of ICS knowledge was repeatedly cited as a challenge by evaluators, and the need significant facilitator prompting was reported

throughout this Objective.

On the final task, 3.4 (review and understand the interaction of branch objectives and the Recovery Action Plan), participants were rated poorly. Half of groups did not complete the task, according to the evaluators.

OBJECTIVE 5 (EEG Task 3.9 – see Appendix E): "The command and general staff will work with Branches to rank-order proposed strategies and actions, in order to develop a Recovery Action Plan (RAP)."

Observations:

A number of strategies and actions that had been developed during the Module 3 break-out session were proposed by the different recovery branches. These were then ranked in order of sequence by the Recovery Coordinator, with help from the branches. This generated a lively and thoughtful discussion.

Although strategies and actions were prioritized and a very basic Recovery Action Plan (RAP) developed, the strategies and actions were not deemed to be "SMART" by participants, evaluators, or the Recovery Coordinator. The TTX did not allow for sufficient time for full development of SMART objectives, either at the branch or RAP level.

Of the three evaluators who specifically assessed this task (3.9), opinions were sharply split: two individuals rated the task "fully completed"; the third rated it "not completed."

Some participants (and the exercise designers) observed that now that participants have a basic understanding of the PDRP via this TTX, future exercises can be more focused in terms of both scenario and branch activation, allowing for fuller exploration of the RAP cycle.

ADDITIONAL OBJECTIVE (EEG Tasks 1.4, 2.3, 3.3 – see Appendix E): "Participants will discuss and record pre-event tools, plans, resources, procedures, etc. that would be useful in recovery, as well as enhancements to the PDRP."

Observations:

Participants generated a number of ideas and recommendations for additional resources and for improvements to the PDRP (see Tables C.4, C.5, and F.1). Across all three Modules, evaluators rated the majority of their groups as having "partially completed" the relevant tasks (1.4, 2.3, and 3.3).

SECTION 4: CONCLUSION

As noted in the previously, this exercise can be considered a significant success: exercise objectives were met (see Appendix E), participants rated all criteria related to exercise design and execution at 4.1 or higher (see Appendix C), and a solid list of desired plans and procedures was generated (see Appendix F).

See Appendix A for tasking and deadlines related to next steps, in the Improvement Plan.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for Fairfax County, VA, as a result of the February 10, 2012 exercise. These recommendations draw on both the After Action Report and the After Action Conference.

Table A.1: *Improvement Plan*

Exercise Objective	Observation (see Sec 3)	Corrective Action(s)	Responsible Agency	Supporting Agency(ies)	Primary POC	Start date	Est. finish date
1.Orientation and Familiarity with the PDRP	This was largely accomplished during the TTX for participants, but wider education and outreach related to the PDRP is indicated	1.1 Additional outreach and education to private and non-profit sector partners, related to the PDRP	OEM	OP[3], EDA	Marcelo Ferriera	Ongoing	Ongoing
		1.2 Establish public-private partnership around emergency response and recovery issues, including education and information sharing	OEM	OP[3], EDA, area chambers; CCC (Citizen Preparedness)	Amanda Phan	3/9/12	12/31/12
		1.3 Additional outreach and education to County departments, including EDA, related to the PDRP	OEM	OP[3], deputy county exec	Amanda Phan	3/9/12	12/31/12

Exercise Objective	Observation (see Sec 3)	Corrective Action(s)	Responsible Agency	Supporting Agency(ies)	Primary POC	Start date	Est. finish date
		1.4 Promote basic ICS 100, 200, 700, 800 training (as appropriate) to all private and non-profit sector partners	OEM	OP[3], EDA	Marcelo Ferriera	Ongoing	Ongoing
		1.5 Organize annual "meet and greet" sessions, organized by RSF Branch, including lead and support agencies, to conduct annual review, train on PDRP, and build/ maintain relationships (potentially involving a drill or exercise)	OEM	Identified RSF Branch Lead Agencies	Amanda Phan	3/9/12	Ongoing/ annual
		1.6 Draft shorter, summary version of PDRP for wider distribution	OEM	OPA	Amanda Phan	Complete	Complete
		1.7 Develop a webinar or video orientation to the PDRP	OEM	OPA	Training Division	3/9/12	2013

Exercise Objective	Observation (see Sec 3)	Corrective Action(s)	Responsible Agency	Supporting Agency(ies)	Primary POC	Start date	Est. finish date
2. Be able to set up Recovery Agency	This was accomplished, but additional practice is indicated	2.1 Integrate recovery issues into future non-recovery exercises, including functional	OEM		Mike Guditus	Complete	Complete
3. Be able to transition from Response to Recovery	Additional practice is indicated on this	3.1 Integrate recovery issues into future non-recovery exercises	n/a (task covered by 2.1)	--	--	--	--
		3.2 Provide ICS 300, 400 training for selected PDRP participants, including identification of and outreach to those staff	OEM		Dave McKernan	3/9/12	Ongoing
4. Be able to determine branch recovery priorities	Additional orientation and education on the Recovery Action Plan (RAP) cycle needed	4.1 Organize annual "meet and greet" sessions organized by RSF Branch, to train on PDRP	n/a (task covered by 1.5)	--	--	--	--
		4.2 Provide ICS 300, 400 training for selected PDRP participants	n/a (task covered by 3.2)	--	--	--	--
5. Be able to develop Recovery Action Plan	Additional orientation and education on the RAP cycle needed	5.1 Design subsequent exercises to simulate RAP development	n/a (task covered by 1.5)	--	--	--	--

Exercise Objective	Observation (see Sec 3)	Corrective Action(s)	Responsible Agency	Supporting Agency(ies)	Primary POC	Start date	Est. finish date
		5.2 Organize annual "meet and greet" sessions organized by RSF Branch, to train on PDRP	n/a (task covered by 1.5)	--	--	--	--
		5.3 Provide ICS 300, 400 training for selected PDRP participants	n/a (task covered by 3.2)	--	--	--	--
6. Develop additional plans and procedures	Additional plans and procedures were identified by participants	6.1 Establish EMCC planning subcommittee to convene RSF Branch-level tasking for pre-event objectives identified in the PDRP	OEM/ EMCC		Bruce McFarlane	3/9/12	12/31/12
		6.2 Confirm that COOP plans account for mgt. of potential staff sharing/ detailing to Recovery Agency	OEM	Identified RSF Branch Lead Agencies, HR	Jim Chandler	3/9/12	12/31/12
		6.3 Develop a unified post-disaster case management system	OEM	DFS, Red Cross, VOAD	Kristin Lion	3/9/12	12/31/12
		6.4 Develop a Service and Information Center plan	OEM	DFS	Amanda Phan	3/9/12	8/31/12

Exercise Objective	Observation (see Sec 3)	Corrective Action(s)	Responsible Agency	Supporting Agency(ies)	Primary POC	Start date	Est. finish date
		6.5 Identify/ inventory private-sector recovery resources, SMEs, key businesses (by sector and geography), existing plans, etc. by developing portal for public-private information sharing, pre- and post-disaster	OEM	OP[3], EDA, area chambers, NVERS/ Arlington OEM	Amanda Phan	3/9/12	12/31/12
		6.6 Review agency responsibility for developing a mass casualty plan	HD	F&R, PD, Medical Examiner, Funeral Home Directors, NVHA	Marc Barbiere	3/9/12	12/31/12
		6.7 Review legal authorities and procedures related to quarantine and martial law, in relation to the PDRP	OCA	F&R, HD, OEM, PD	Marilyn McHugh	3/9/12	12/31/12
		6.8 Clarify roles and respon-sibilities related to management of CBRN contamination	OEM	F&R, HD, DPWES	Roy Shrout	3/9/12	12/31/12
7. Execute improvements to the PDRP	Potential improvements to the PDRP were identified by	7.1 Review PDRP for overall clarity/ simplicity of language	OEM/ EMCC		Bruce McFarlane	Jan. 2013	Jan. 2013

Exercise Objective	Observation (see Sec 3)	Corrective Action(s)	Responsible Agency	Supporting Agency(ies)	Primary POC	Start date	Est. finish date
	participants, for executing in the near-term or at the Plan's 4-year update	7.2 Assess and address need to further clarify between short- and long-term objectives	OEM/ EMCC		Bruce McFarlane	Jan. 2013	Jan. 2013
		7.3 Assess and address need to clarify Community Recovery Planning v RAP	OEM/ EMCC	HCD	Bruce McFarlane	Jan. 2013	Jan. 2013
		7.4 Add PDRP contact information to Emergency Call-Out List	OEM	Identified RSF Branch Lead Agencies	Amanda Phan	3/9/12	5/30/12 (initial); then Ongoing
		7.5 Expand supporting agency rosters, inclusive of towns	OEM	Identified RSF Branch Lead Agencies	Amanda Phan	3/9/12	5/30/12 (initial); then Ongoing
		7.6 Add index and pagination to the complete plan .pdf file	Witt Associates		Hal Cohen	3/9/12	3/31/12
		7.7 Execute other page-specific text edits noted in Appx. F	OEM		Bruce McFarlane	Jan. 2013	Jan. 2013
8. Subject-matter-specific training (CBRNE)	Some participants identified need for subject-matter specific training	8.1 Provide introductory CBRNE education/ training to selected PDRP staff	F&R	OEM	Craig Buckley	3/9/12	Ongoing

APPENDIX B: ACRONYMS

Table B.1: *Acronyms*

Acronym	Term
CBRN	Chemical, Biological, Radiological, and Nuclear
Cs-137	Caesium ion (Caesium-137) present in caesium chloride salt
DHS	U.S. Department of Homeland Security
EMS	Emergency Medical Services
EOC	Emergency Operations Center
F&R	Fairfax County Fire and Rescue Department
HD	Fairfax County Health Department
HSEEP	Homeland Security Exercise and Evaluation Program
ICP	Incident Command Post
MOU	Memorandum of Understanding
OEM	Fairfax County Office of Emergency Management
PD	Fairfax County Police Department
PDRP	Fairfax County Pre-Disaster Recovery Plan
PIO	Public Information Officer
POC	Point of Contact
RAP	Recovery Action Plan
RDD	Radiological Dispersal Device (“dirty bomb”)
SitMan	Situation Manual
TCL	Target Capabilities List
TTX	tabletop exercise
UTL	Universal Task List
VDEM	Virginia Department of Emergency Management

APPENDIX C: PARTICIPANT FEEDBACK ANLYSIS

The below feedback results are derived from the participant feedback forms (see Appx. D). Open-ended feedback (Tables C.2-C.6) is shown in rank-order by the frequency of mention of each item.

Table C.1: *Participant Quantitative Assessments (average scores)*

	Players (35)	Observers (6)	Facilitators (3)	Evaluators (2)	Average
The exercise was well structured and organized.	4.24	4.67	4.67	4.00	4.39
The exercise scenario was plausible and realistic.	4.23	4.17	4.67	4.00	4.26
The facilitator and controllers were knowledgeable about the topic and kept the exercise on target.	4.36	4.50	5.00	4.50	4.59
The exercise documentation provided to assist in preparing for and participating in the exercise was useful.	3.65	4.33	5.00	4.50	4.37
Participation in the exercise was appropriate for someone in my position.	4.12	4.67	5.00	4.50	4.57
The participants included the right people in terms of level and mix of disciplines.	3.53	4.17	4.67	4.00	4.09
This exercise allowed my agency to gain familiarity with the Pre-Disaster Recovery Plan	4.00	4.17	4.67	4.00	4.21
After this exercise, I believe Fairfax County is better prepared to deal successfully with a catastrophic disaster.	3.76	4.33	4.33	2.50	3.73

Table C.2: *"Strengths" open-ended responses (ranked)*

	Players	Observers	Facilitators	Evaluators
Group Structure / Collaborative / Facilitators / Overall Organization	26	1		1
PDRP was a strength (both the fact that it exists and the fact that it is well written	10	1		
Realistic Scenario	9	1	1	
No. of Participants & Knowledge (SMEs also)	5	2	1	
Facilitators and other staff	4	1	1	
Learn about plan & hands on	4	1		
Handouts / Discussion Questions	2	2	1	
Identified need for communications between branches, agencies and external partners	4			
Good interaction and discussion		1	3	
Recognition of need for cross-functional collaboration so that all objectives are mutually supportive	3			
Forced players outside of their "boxes"	3			
Schedule	2			1
Identified need to update internal emergency preparation plans	2		1	
Good objectives	2			
Facility				1
Clear instructions		1		
working lunch			1	
Developed understanding of what other agencies do			1	
Brief-outs			1	
Degree of integration w/ FEMA plan	1			

Table C.3: *"Needs Improvement" open-ended responses (ranked)*

	Players	Observers	Facilitators	Evaluators
Time Issues (not enough time)	14	4	1	
Too many handouts / Not enough time to review them	11	2		
Lack of clear instructions / confusion / more background	7			
EDA Involvement	3	1		
More active (stronger) facilitation	3	1		
How do you make other staff aware of plan?	3			
Intermediate vs. Long term recovery stages	3			
Everyone had a different level of understanding re: plan	3			
Engage lead companies who are planning to step in before an emergency occurs	2			
Improve lists of supporting agencies	2			
Agencies have not thought much about recovery		1		1
Plan was not used as best possible to answer questions by players			1	1
Difficult to decide lead agency for cultural and natural resources		1		
Prioritization exercise was a little confusing for some			1	
Additional staff need to be identified			1	
Need to incorporate recovery into yearly training			1	
Planning process is not well known				1
More community groups	1			
Groups need to focus only on info given and not conjecture	1			
More injects from command staff	1			
Identify agency with list of all businesses in FFX	1			
Hard to focus on recovery since this was very much a response exercise in the past	1			
Large community services group	1			
More time w/ larger scale exercise	1			
lack of info re: demographics, business infrastructure etc	1			

	Players	Observers	Facilitators	Evaluators
Ensure all critical agency players are represented in group	1			
Establish partner work groups developed from the TTX	1			
Introductions needed at beginning for all players	1			
Break out discussions got bogged down in details	1			
Should only refer to PDRP for answers (checking plan for correctness)	1			
Specify difference between Board for specific area and Overarching board to ensure the county as a whole is recovering	1			
Long term Recovery branch needed people with long range planning experience	1			
Too much overlap of objectives between groups	1			
Separate recorder	1			
Artificial assignments need to be explained prior to discussions	1			
Need to educate staff on radiation capabilities	1			
A different case (scenario)	1			

Table C.4: *"Corrective Actions" open-ended responses (ranked)*

	Players	Observers	Facilitators	Evaluators
Better educate/ train all county staff on the PDRP and annexes	11		2	
Not enough time/ too much to cover	4	1	1	
Fill all player spots with lead agencies and key stakeholders	5			
Simplify handouts and instructions	4			
More SMEs needed (local/federal/private)	3			
Identified objectives were not "SMART"	2			
Spread out break out groups, hard to hear / smaller groups	2			
Incorporate recovery into agency exercises and plans	1	1		
Feed command/policy decisions to the functional groups (get hung up waiting for these to move forward)	2			
Ensure all players received links to documents needed pre-exercise	1	1		
More discussion between groups / some issues crossed between groups	2			

	Players	Observers	Facilitators	Evaluators
Plan needs to be distributed in a summary format to all county staff	2			
Separate natural and cultural resources into two groups		1		
Need more participants for natural and cultural resources		1		
Further develop the plan with annexes and SOPs		1		
Continue to engage stakeholders and key decision makers		1		
Better skilled/trained facilitators		1		
Define "Hotwash" at beginning		1		
Have a yearly sit down with all branches to meet and greet and to review what the plan does and what each branch does			1	
Next exercise should be a walk through with recovery in place: develop action plan and have all branches work together			1	
Players need more practice in developing objectives and the planning process				1
Exercise the plan again				1
Training - NIMS				1
Exercising - Current plans / procedures				1
Address EDA board asking them to direct EDA staff to be involved pre and during emergency	1			
More collaboration re: specific plans and actions. Work out the details	1			
Use plan document as primary source of information	1			
Consider need for overarching Board	1			
Increase staffing to provide recorders	1			
More detail in scenario	1			
Training related to CBRN for Response / Recovery	1			
Provide examples of guidelines to objective length	1			
Give more than one case	1			

Table C.5: *"Additional Plans, Policies, Procedures" open-ended responses (ranked)*

	Players	Observers	Facilitators	Evaluators
review and train on COOP issues	2		1	
Zoning ordinance needs clause that will allow for suspension during an emergency	1	1		
More SOPs, MOUs needed at an operational level	1		1	
Reference to other jurisdictions and states that would respond needed	2			
Pre-identify key personnel and alternates (people, not positions) and means of contact	2			
Evaluate staffing needs throughout the county for depth of position			1	
Develop recovery functions in yearly drills			1	
Have each branch meet yearly (at least) and review the document			1	
Increase basic level of training in planning process				1
Move to a functional exercise with a narrower scope				1
Don't use such a catastrophic event				1
All current plans, procedures, policies, and operating procedures should be evaluated as to their fit into the PDRP				1
Check policies Re: reassigning county employees - is emergency declaration needed for entire reassignment?	1			
Obtain best practices from areas that have been through these scenarios	1			
OSHA regulations relating to prolonged work periods might conflict with recovery efforts	1			
Need to review the HD responsibility for mass casualty plan	1			
Layout of Annexes in PDRP should be reviewed	1			
Implementation of actions discussed would be difficult	1			
Plans to manage contaminated waste	1			
Policy on redevelopment of contaminated sites	1			
Shortened version of the PDRP	1			
Ensure cross functional issues are fully considered and that all activities are mutually supportive	1			

	Players	Observers	Facilitators	Evaluators
Martial law / Mandatory Evacuation plan needs to be defined.	1			
How does all department coordinate during emergencies	1			

Table C.6: *"Other Feedback" open-ended responses (ranked)*

	Players	Observers	Facilitators	Evaluators
Great facility, facilitators, and staff	3	2		
Timing concerns, need more time for discussion	3			
Would like to see another exercise with the same players in 12-18 months with a different scenario and actually stand up a recovery agency	2		1	
Need stronger engagement of private sector partners	2			
Better facilitator training/ Stronger facilitators	2			
More consideration of federal agency involvement (EPA, REAC/TS)		1		
Only non-plausible aspect was demolition of facilities in a six month period. Decision would take years		1		
Big need to continue educating agencies on the plan; Plan is too large to learn in the TTX			1	
Develop a webinar or video on the PDRP process			1	
A PDRP copy for each participant (print own or share with one other person)			1	
Having CBRN SME in room was very helpful when addressing safety concerns.	1			
All groups report out after each module	1			
Too much specific guidance for navigating the plan - worried about in a real emergency	1			
Consider exercising plan at a FE and FSE level	1			
Locating exercise location: "MPSTOC" is not sufficient. Tell Google where Alliance Drive is.	1			
Lids that fit the coffee cups	1			
In the online version of the plan, add PDF page numbers to the TOC	1			
Future exercises within each branch	1			

	Players	Observers	Facilitators	Evaluators
Splitting housing, social and human services may not have been a good idea	1			
Participants not familiar with PDRP	1			
Too many multi-part questions	1			
Nice job with the plan	1			

APPENDIX D: PARTICIPANT FEEDBACK FORM

Exercise Name: Fairfax County Pre-Disaster Recovery Plan TTX
Exercise Date: February 10, 2012

Participant Name:_____ **Title:**_____

Agency/ Organization:_____

Role: __Player __Observer __Facilitator __Controller/ Evaluator

PART I: RECOMMENDATIONS AND CORRECTIVE ACTIONS

1. Based on the exercise today, list the top 3 strengths and top 3 areas that could use improvement. (These may concern the Plan document, players' performance, or the exercise itself.)

   _____
   _____

2. Pls. identify corrective actions that should be taken to address areas for improvement identified in Questions 1 above.

   _____
   _____

3. Pls. list any policies, plans, and procedures that should be reviewed, revised, or developed to support the Pre-Disaster Recovery Plan.

   _____
   _____

PART II – EXERCISE DESIGN AND CONDUCT: ASSESSMENT

Please rate, on a scale of 1 to 5, your overall assessment of the exercise relative to the statements provided below, with **1** indicating **strong disagreement** with the statement and **5** indicating **strong agreement.**

Assessment Factor	Strongly Disagree				Strongly Agree
a. The exercise was well structured and organized.	1	2	3	4	5
b. The exercise scenario was plausible and realistic.	1	2	3	4	5
c. The facilitator and controllers were knowledgeable about the topic and kept the exercise on target.	1	2	3	4	5
d. The exercise documentation provided to assist in preparing for and participating in the exercise was useful.	1	2	3	4	5
e. Participation in the exercise was appropriate for someone in my position.	1	2	3	4	5
f. The participants included the right people in terms of level and mix of disciplines.	1	2	3	4	5
g. This exercise allowed my agency to gain familiarity with the Pre-Disaster Recovery Plan	1	2	3	4	5
h. After this exercise, I believe Fairfax County is better prepared to deal successfully with a catastrophic disaster.	1	2	3	4	5

PART III – OTHER PARTICIPANT FEEDBACK

Please provide any additional thoughts or recommendations on how future exercises could be improved.

_____

_____

APPENDIX E: TTX EVALUATION

The below performance results are derived from the evaluators' exercise evaluation guides (EEGs). Evaluators and players were instructed that there was no penalty for not getting to any particular question; questions not addressed were given "n/a" scores by the evaluators and are not tallied below. For more information and analysis, refer to AAR Section 3.

Table E.1: *Results by Break-out Group*

Task Completeness	Command/ General Staff	Community Recovery Planning RSF	Economic Recovery RSF	Natural and Cultural Resources RSF	Housing RSF	Infrastructure RSF	Safety and Security RSF	Community Services RSF (Health)	Community Services RSF (Social/ Human)
Tasks evaluated	18	17	17	13	17	18	13	13	18
Fully completed	50%	41%	88%	31%	29%	56%	69%	54%	50%
Partial completed	50%	53%	12%	31%	59%	39%	31%	46%	39%
Not completed	0%	6%	0%	38%	12%	6%	0%	0%	11%

Table E.2: *Results by Task*

Task #	Evaluation criteria	Task Fully Completed	Task Partially Completed	Task Not Completed
1.1	players designated table facilitator, scribe	89%	11%	0%
1.2	players reviewed and actively discussed the scenario	78%	22%	0%

Task #	Evaluation criteria	Task Fully Completed	Task Partially Completed	Task Not Completed
1.3	player(s) reviewed the PDRP and used it to help formulate responses to the scenario	56%	33%	11%
1.4	players discussed and recorded other pre-event tools, plans, resources, procedures, etc. that would be useful in recovery	43%	57%	0%
1.5	players staffed the Recovery Agency and discussed related issues (C&G only)	100%	0%	0%
1.6	Players discussed the need for their Branch to be activated (Branch only)	78%	22%	0%
1.7	players discussed pre-event objectives and considered whether (a) they are appropriate and (b) whether others are needed (Branch only)	50%	50%	0%
2.1	players reviewed and actively discussed the scenario	56%	44%	0%
2.2	player(s) reviewed the PDRP and used it to help formulate responses to the scenario	44%	56%	0%
2.3	players discussed and recorded other pre-event tools, plans, resources, procedures, etc. that would be useful in recovery	33%	50%	17%
2.4	players discussed the challenges and issues each faces in their Recovery Agency staff role (C&G staff only)	0%	100%	0%
2.5	players discussed potential strategies if existing funding programs prove insufficient (C&G staff only)	0%	100%	0%
2.6	players discussed which Recovery Group(s) to activate, and who should be the Lead Agency for each (Branch only)	100%	0%	0%
2.7	players discussed when their Branches should transition from reporting to the EOC to reporting to the Recovery Agency (Branch only)	43%	43%	14%
3.1	players reviewed and actively discussed the scenario	44%	56%	0%

Task #	Evaluation criteria	Task Fully Completed	Task Partially Completed	Task Not Completed
3.2	player(s) reviewed the PDRP and used it to help formulate responses to the scenario	60%	40%	0%
3.3	players discussed and recorded other pre-event tools, plans, resources, procedures, etc. that would be useful in recovery	29%	57%	14%
3.4	Players reviewed and understood how Branch-level planning interacts with the Recovery Action Plan	13%	38%	50%
3.5	Players described how they would interact with various County and external partners (C&G staff only)	100%	0%	0%
3.6	Players developed three objectives that their Branch would need for Recovery (Branch only)	71%	29%	0%
3.7	Players discussed additional informational or resource needs, and how they might fill these (Branch only)	13%	63%	25%
3.8	Players discussed potential challenges or impediments to their objectives (Branch only)	14%	71%	14%
3.9	The C&G staff worked with the Branches to prioritize objectives and develop a Recovery Action Plan	67%	0%	33%

APPENDIX F: ADDITIONAL RESOURCES IDENTIFIED

The below resources were identified by break-out group consensus at each table.

Table F.1: *Additional Resources to be Developed (Plans, SOPs, etc.)*

Resource	Responsible party
Safety and Security	
List resources from supporting jurisdictions for Herndon and Vienna etc.	Keith Johnson
Add training of personnel to role of CBRN group.	Keith Johnson
Economic Recovery	
Inventory of Businesses and Industry by geography	EDA & Chambers
Inventory of Private Sector emergency recovery leads and plans	OEM & Chambers
Consider developing networks of private sector recovery leads	Chambers & OEM
Web based portal for sharing documents	OEM
Reach out to Northern Virginia Chamber Groups to communicate the plan and resources	OEM
Identify supply chain leadership	OP3 & OEM
Identify potential business recovery resources	OP3 & OEM
For all sectors of economic recovery - Identify key private sector experts and stakeholders, associations, businesses etc.	OP3 & OEM
Include data on economic recovery branch	
Infrastructure	
Pre-planning/hazard briefing sheets related to CBRN / radiological issues	FRD, OEM, HD
Infrastructure branch needs to be included in decision making for demo & long term rebuild	Policy group
Community Recovery Planning	
EDA more integral in community recovery planning	CRP
Further distinguish comm. Recovery planning from other RSFs (who and why)	OEM & Planners
better understanding of how agencies split between multiple RSFs manage staff and time	OEM & Planners
Simplified plan document; can be difficult to digest in paragraph form	OEM & Planners
RSF Meetings on a more regular basis / set up RSFs for regular county exercises	OEM

Resource	Responsible party
Community Services (Health)	
p. G-11 Fairfax - Falls Church CSB Add: Mental health services, psychological first aid, linkage to other MH providers.	OEM
p. G-11 Volunteer Support Coordinate mental health services with other organizations	OEM
p. G-5: CSB. Replace "unmet needs provision" with “psychological first aid, linkage to MH providers.”	OEM
Community Services (Social/ Human)	
Develop a case management database to track location and status of residents / victims.	OEM
Family Asst. Center plan	Family Services
Agencies that need to participate in future: NCS, office to end and prevent homeless	
Add “Virginia Hospital Healthcare Assoc.”	OEM
p. G-9 add "employment services"	OEM
Housing	
Support Agency: Department of Social Services is called "Department of Family Services" in FFX County	OEM

APPENDIX G: 3-UP/ 3-DOWN ASSESSMENT

The below "3-up/ 3-down" assessments were identified during the player hotwash (during the exercise) and the evaluator hotwash (immediately following). They have been grouped for clarity. The sequence of content does *not* indicate prioritization.

Table G.1: *"Three Up" Hotwash feedback*

Evaluators	Players (* indicates multiple references to something)
Discussion • once they got comfortable, things flowed. (Once they understood there was no hidden agenda.) • Very interactive discussion • They got right into the questions – great interactions • They did great – little need for facilitator – very productive • Facilitator was very helpful in explaining ESFs and RSFs • S&S branch had a hazmat SME – this was good for them; other groups could have benefitted from that	Discussions* • Many perspectives • Facilitator support • Having SME in the room
Scenario • perfect – enough to cause serious pain, but not enough to overwhelm the players • Modules built upon one another and challenged participants to think unconventionally and identified training and planning gaps. Participants made reasonable recommendations	Realism of scenario*

Evaluators	Players (* indicates multiple references to something)
Use of the PDRP • By the end, (my group) realized that the plan had the answers • The C&G staff all brought their own printed copies of the PDRP – they knew it and used it • Participants negotiated the PDRP with relative ease; able to find answers quickly.	Plan itself • It exists* • Comprehensive • Good list of partners • Some transitions clear • Modular Structure • Integration with the Federal government
Participants' Knowledge • They knew the other relevant plans well, and they identified where other plans will need to be updated to reflect the PDRP	
	Interactions • Got agencies together* • Number of people, avenues to building partnerships • Private sector participation
	TTX structure/ design • Made us THINK… stuff we hadn't encountered • Increased plan familiarity • Lots of resources available • Good materials • Organization • Good objectives

Table G.1: *"Three Downs" Hotwash feedback*

Evaluators	Players (* indicates multiple references to something)
Time • Needed more time for discussion – cut to 2 modules? • More time needed for scenario recap (after briefing, before each discussion … so they can talkin their break-outs about it) • Insufficient time to complete objectives based upon EEGs for each module.	Time • Rushed* (suggest 2 vs. 3 modules) • Too many questions
Use of the PDRP/ the PDRP itself • Our players were not familiar with the plan (housing) • They didn't always go back to the plan, even when the facilitator pointed out that they should • It was like an open book test where they refused to open the book • Clarify/ simplify wording in the PDRP to make it easier for quick consumption.	The Plan itself • Improve clarity re: short term vs. long term phases* • Clarify between CRP and RAP • Need to identify relevant SMEs (people, not offices; incl. alternates) • Need a greater number of supporting agencies (in cultural resources, etc.)
Discussion • (my group) was difficult to facilitate (large number, existing institutional issues, widely varied backgrounds and expertises) • They defaulted to being very tactical – didn't really get strategic approach (set goals, set objectives, then set tactics) • Although there were questions aimed at other groups, and the facilitator encouraged them to go out and talk, they didn't go – maybe allow time for this at the end of each module, or design the space better?	Discussion • SMEs spread too thin

Evaluators	Players (* indicates multiple references to something)
Need for training (esp. ICS) • lack of ICS knowledge a problem; also (for those with some ICS knowledge) inability to apply ICS, set objectives • Private sector doesn't know ICS or even how the county works, what its depts. are, basic command and coordination – need PPP to get them acculturated to all this • Train up the private sector participants • Some players did not see the necessity for a command structure • Setting branch objectives was difficult … understanding how branches participate in overall RAP-setting; forget about branch tactical planning! • Ensure proper reference to CBRNE Plan, and train EOC personnel / responders as needed.	Need for training (PDRP, ICS) • Too much jargon: ESF, ICS, etc. • Get everyone ELSE familiar with the plan • Educate staff on RAD capability
Scenario • It was hard for some of them to get their heads around the scope of the scenario • Failure to understand how exercises work (had to counsel them, "don't fight the scenario")	Scenario • Assumptions in the scenario needed more explanation / facts
Future steps • Assign specific agencies to develop SOP's or other plan components identified by participants.	Future steps • Incorporate recovery into non-recovery TTX
Facility • Break out room was too noisy	
	Need for improved outreach • Include private sector SMEs • Include EDA

Evaluators	Players (* indicates multiple references to something)
	Misc. comments • Hard for response agencies to focus on recovery • Computer based activity? USE the EOC • Enormity of plan – hard to convey