



RDA: The First Look-Implement

Rapid Damage Assessment (RDA) Full-Scale Exercise

2022 Exercise Series – Event 3 of 3

October 20, 2022

After-Action Report & Improvement Plan (AAR-IP)



The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine to include the National Preparedness Goal and related framework and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.

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EXERCISE OVERVIEW

Exercise Name	<i>RDA: The First Look-Implementation Full-Scale Exercise</i>
Exercise Dates	October 20, 2022
Scope	This five (5) hour mixed exercise event, hosted throughout Multnomah County, will provide countywide partners the opportunity to engage in a rapid damage assessment operations exercise event following a mid-level earthquake scenario. While the main scope of the County full-scale exercise is to test the ability for Multnomah County to organize and respond to this hazard, countywide partners have been collaborating on their rapid damage assessment program participation during this event. External partner participation is based on their damage assessment program posture.
Focus Area(s)	Response
Capabilities	Operational Coordination, Infrastructure Systems
Objectives	<ol style="list-style-type: none"> 1. Multnomah County Departments will complete field damage assessment operations and coordination in response to a 5.5 magnitude Portland Hills Earthquake event within four (4) hours of StartEx. 2. Multnomah County Departments, and county-wide response partners, will submit rapid damage assessment information and data to the County in response to a 5.5 magnitude Portland Hills Earthquake event within four (4) – Five (5) hours of StartEx. 3. Multnomah County will collect and manage the incoming Rapid Damage Assessment information and data in the County Emergency Operations Center in response to a 5.5 magnitude Portland Hills Earthquake event within six (6) hours of StatEx. <ul style="list-style-type: none"> • <u>Note</u>: Local response partners will have their own internal objectives as part of this exercise event.
Threat/Hazard	Earthquake
Scenario	A 6.0 magnitude Portland West Hills Fault Line Earthquake Event
Sponsor	Multnomah County Office of Emergency Management (MCEM)
Participating Organizations	A participants list can be found in Appendix B.
Point of Contacts	<p>Robert Quinn, Training & Exercise Specialist – Exercise Director Multnomah County Emergency Management Robert.quinn@multco.us 503-307-4129</p> <p>Matt Burke, Logistics Division Lead – Exercise Evaluation Lead Multnomah County Emergency Management Matthew.burke@multco.us 971-988-9939</p>

GENERAL INFORMATION

Exercise Intent

RDA: The First Look-Implementation Full-Scale Exercise was the third component of three in the Multnomah County 2022 Rapid Damage Assessment (RDA) Exercise Series. This series was designed for county-wide response partners to design, develop, validate, and implement their RDA programs in collaboration with the County government. This Exercise Series included the following events:

- ~~*RDA: The First Look Development*~~—August 2022 Workshop Event (**Compete**)
- ~~*RDA: The First Look Validation*~~—August 2022 Tabletop Event (**Compete**)
- ~~*RDA: The First Look Implementation*~~—October 2022 Full-Scale Event (**Compete**)

As part of the County Integrated Preparedness Plan (IPP), Infrastructure Systems has been identified as a key priority focus area for emergency management-related work through June 2024 (Fiscal Year '24). The further development of the County Damage Assessment Plan, in collaboration with county-wide partners, allows us to take steps forward within this topic.

This exercise event built off the August 2022 Workshop and Tabletop Exercise Events that provided participants the space to design, develop, and validate their internal RDA Programs. Resources, tools, and best practices were gathered from throughout FEMA Region X to assist local response partners develop their RDA Programs. This Full-Scale Exercise tested the products developed and validated in the two August exercises in an evaluated field-environment to identify areas of strength and opportunities for programmatic improvement.

The *RDA: The First Look-Implementation* Full-Scale Exercise was also held in alignment with The 2022 Great Shakeout. The findings from this exercise event, and the 2022 Exercise Series as a whole, will be used to complete a full revision of rapid damage assessment operations and build towards a future Initial Damage Assessment (IDA) Exercise Series in 2023 or 2024.

The Exercise Planning Team was made up of representatives from both governmental and other response entities within Multnomah County with the responsibility to design and coordinate this exercise event. A big thank you to everyone that participated on the Planning Team (Appendix C), your guidance and feedback were critical to the success of this event.

The exercise event tested the rapid response capabilities to a mid-level Portland West Hills Fault earthquake scenario, and was hosted at a number of facilities throughout Multnomah County with participating organizations playing at varying exercise levels. This exercise includes players participating in tabletop, drill, and full-scale exercise environments.

Exercise Summary

On Thursday, October 20th the 2022 RDA Exercise Series wrapped up with the full-scale exercise. The event included varying levels of play, including: County EOC activation of the Damage Assessment Unit and Geographic Information Systems Unit; field assessment play from the City of Gresham (County Facilities field assessment play delayed due to smoke until November 9th); real-time assessment submissions by the approximately 10 county-wide organizations, a parallel tabletop exercise by the City of Portland, and pre-event organizational engagement with approximately 10 organizations to develop simulated data for the Simulation Cell. An incredible turn-out that provided organizations the ability to participate at a level they felt their program was prepared to do.



The exercise ended with a full participant hybrid hot wash that has helped build this After-Action Report and Improvement Plan (AAR-IP). The MCEM intends to offer a damage assessment annually to continue to build capability within this topic. The level of exercise play may adjust each year, but a consistent exercise event will ensure this topic is continuously prioritized and addressed.

Analysis of Capabilities

Aligning exercise objectives and capabilities provides a consistent structure for evaluation that surpasses single exercise events to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned capabilities, and performance ratings for each capability as observed during the exercise and determined by the evaluation team.

Exercise Objective	Core Capability	Rating
Multnomah County Departments will discuss field damage assessment operations and coordination in response to a 5.5 magnitude Portland Hills Earthquake event.	Operational Coordination, Infrastructure Systems	S-
Multnomah County Departments will discuss the process for submitting damage assessment information and data to the County in response to a 5.5 magnitude Portland Hills Earthquake event.	Operational Communications	M
Multnomah County will discuss the Rapid Damage Assessment collection and management in the County Emergency Operations Center in response to a 5.5 magnitude Portland Hills Earthquake event.	Operational Coordination, Infrastructure Systems	S/P

Table 1. Exercise Objectives and Associated Capabilities

Ratings Definitions

Performed without Challenges (P): The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Performed with Some Challenges (S): The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

Performed with Major Challenges (M): The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Unable to be Performed (U): The targets and critical tasks associated with the capability were not performed in a manner that achieved the objective(s).

EXERCISE FINDINGS

The following sections provide an overview of the performance related to each exercise objective and associated capability, highlighting strengths and areas for improvement.

The reference sections below include an abbreviation to where the content can be found in the Exercise Evaluation Guides (EEG).

O1-CT1 = Objective #1, Capability Target #1

O2-CT1 = Objective #2, Capability Target #1

Objective 1 – Field Assessments & Damage Assessment Unit Implementation

Multnomah County Departments will complete field damage assessment operations and coordination in response to a 5.5 magnitude Portland Hills Earthquake event within four (4) hours of StartEx.

Core Capability: Operational Coordination, Infrastructure System

Strength(s)

- *Strength #1.1.1 – County Departments and Partners completed simulated assessments prior to StartEx.* Departments and Partners who were unable to play on October 20th engaged in the exercise participated by “collecting” rapid damage assessment information via the Organizational RDA Report for distribution to the exercise players day-of. Products provided to the SimCell were based on previous confirmation of locations where they would need to gather data, who would gather this data, and how and with what tools they would collect it. This engaged over 10 organizations with practice using this form (*Reference: Objective #1*)
- *Strength #1.1.2 – The County EOC successfully established and set up the Damage Assessment Unit.* The County EOC Damage Assessment Unit had never been activated before in any real-world or exercise event. On October 20th, two Damage Assessment staff spent five hours establishing an organizational structure, the relevant resources and tools (ex. DA Unit emails, County Google Drive, and the DA Unit position description), and establishing an incident documentation structure (ex. where to host documentation). The Unit established communications between staff in the physical EOC and their online counterparts managing GIS functions. This was a huge step in building a fully functioning Damage Assessment Unit within the County EOC.
(*Reference: Objective #1, Capability Target #1*)

Area(s) for Improvement

- **[County-Wide Comment]** *Area for Improvement #1.2.1: Data collection within the field assessment tools is currently too focused on buildings.*
 - Reference: External Participation Finding
 - Analysis: The current Multnomah County tools available to support damage assessment collection (ArcGIS Survey123/MultCo Organizational RDA Report) are too geared towards collecting data from building damage, and is not as useful for collecting data for other critical infrastructure damage such as roads, bridges,

water pipes, etc. New sections of these tools should be designed to collect a wide range of damage types (roads, bridges, other critical infrastructure).

- **[County-Wide Comment]** *Area for Improvement #1.2.2: Majority of RDA field assessment capabilities and tools are not currently developed or active with focus on local partner use and responsibilities.*
 - Reference: External Participation Finding
 - Analysis: The Multnomah County 2022 RDA Exercise Series demonstrated the need for additional development of field assessment programs for county-wide partners. There are limited partners that have built-out programs that are trained and exercised upon regularly. Because of this, the October 20th Exercise event only included 2 partners actually performing field assessments in a simulated exercise environment. While the August 2022 Workshop was available to assist partners develop their programs, the timeline provided was too restrictive. Additional events/opportunities and guidance need to be implemented to assist organizations in developing their field assessment tools, responsibilities, and programs.
- **[County-Wide Comment]** *Area for Improvement #1.2.3: Severity of Damage Categories needs to be standardized county-wide.*
 - Reference: External Participation Finding
 - Analysis: The Federal Emergency Management Agency has established four categories of damage (Destroyed, Major, Minor, Affected), however the County failed to ensure these categories were consistent throughout the developed tools and partners resources. This created challenges for the EOC DA Unit Team as it was difficult to assess severity of damage from the incoming RDAs with varying titles/categories of damage. They also found it challenging to evaluate the severity of damage with minimum information/details coming in - without fully completed Organizational RDA Reports (which could be likely during real-world events) the DA Unit felt that it was up to them to make an impact determination.

Participants also noted the interest in adding a category for “not yet evaluated” if they are submitting reports for their full infrastructure and "confidential (but evaluated)".
- **[County-Wide Comment]** *Area for Improvement #2.2.4: County Organizational RDA Report Needs Revision for Improved Partner Understanding*
 - Reference: External Participation Finding
 - Analysis: The Organizational RDA Report Version 1 was developed in 2022 as a resource for county-wide partners to use for submitting RDA assessments. This tool worked at the basic level of providing assessments in a structured format, however wide use of the tool identified room for improvements. Categories such as the “Type of Infrastructure” was challenging for some organizations who had overlapping types of infrastructure in a single location. Requesting information about “Accessible Via Road” needs to be revised to determine how/if this information can be helpful; and, “Inspector Agency” was included as a dropdown

with only large jurisdiction titles included - this would not work for non-governmental partners or help the end user understand who conducted the windshield survey. Additional revision of this tool to ensure the content is clear, the tool is trained upon, and that it integrates into the County GIS tool is critical.

Entries into the Survey123 form had two areas to input addresses: 1. the address is typed in, 2. the address needs to be found in a map interface. This second step seemed redundant, but was crucial in the geo-placement of the assessment on a map. Language should be added to identify this second requirement and how it differs from the address as purely a text element.

- **[Internal County Comment]** *Area for Improvement #1.2.5: Additional topic-specific guidance, operating procedures and training is needed for the County Damage Assessment and Geographic Information Systems Units.*
 - Reference: Objective #1, Capability Target #1
 - Analysis: The County Damage Assessment Unit was staffed for the first time during the October 20th Exercise. While position descriptions were developed for use during the exercise, those resources had limited direct support and guidance for those that played within this role and the EOC GIS Unit. This isn't a surprise as the initial version of this resource was developed using the 2018 Damage Assessment Plan guidance and similar online resources, and it had never had the opportunity to be truly validated during simulated exercise. To assist future staff within these two units, it is critical to update the position descriptions to include specific resources used, and best practices found, during the October 20th event.
- **[Internal County Comment]** *Area for Improvement #1.2.6: County EOC access to position-specific email accounts are not widely known.*
 - Reference: Objective #1, Capability Target #1
 - Analysis: Multnomah County has developed position-specific emails for use during activation of the EOC. These email accounts assist with continuous coordination and remove specific individuals from being identified as the main point of contact. During the October 20th Exercise, both the DA and GIS Units experienced issues accessing the account log-on details and the accounts. GMail accounts restrict multiple account log-ons in similar browsers, requiring staff to find other options for accessing both personal and position-specific emails.

The team also shared concern regarding the system being used to locate position-specific email log-on information, with it not meeting information security standards. Additional conversations with the County IT Team will be required to ensure this information is available in a secure manner moving forward.
- **[Internal County Comment]** *Area for Improvement #1.2.7: Multnomah County needs to identify who will staff the EOC DA Unit.*
 - Reference: Objective #1, Capability Target #1
 - Analysis: Those who staffed the EOC DA Unit during the October 20th Exercise were general members of the County Emergency Management Team, and the County EOC Planning Section. This creates a concern for future activations if

those staff are pulled in different directions based on the situation. Multnomah County needs to determine functional areas, or individually interested staff, within the County that can dedicate their training focus to this unit. The DA Unit is a critical component of the County during both the response and recovery phases. During the response phase this unit assists building a Common Operating Picture the County can further direct operations, and during recovery this unit is critical to building the financial impact analysis to bring in external financial assistance county-wide.

The EOC Damage Assessment Unit consensus was that any employee could be trained to serve in the DA Unit. However, given the volume and wide variety of formats that information and data will be flowing into the Unit, and need to be processed, the participants are hopeful for a cadre of personnel along with subject matter experts to populate the DA Unit moving forward. Integrating this group into future exercises will allow Multnomah County EM to validate the number and breadth of expertise needed.

Objective 2 - Submitting Information and Data to County

Multnomah County Departments, and county-wide response partners, will submit rapid damage assessment information and data to the County in response to a 5.5 magnitude Portland Hills Earthquake event within four (4) hours of StartEx.

Core Capability: Operational Communications

Strength(s)

- *Strength #2.1.1 – County Organizational RDA Report, Version 1 was Widely Tested:* Over 15 county-wide organizations engaged with this report either prior to (developing injects), or during the October 20th Exercise. This provided partners the opportunity to practice with the expected tool, and experience the challenges to assist the County improve this resource.
- *Strength #2.1.2 - County-Wide Partners were Trained on, and used, the Expected Submission Process.* The October 20th Exercise provided those participating during, or prior to, the opportunity to build awareness for how/where to submit damage assessment data to in the County EOC. Without the County EOC Operations Section activated to accept function-specific assessments, the full process was unable to be tested, but county-wide partners practiced submitting assessments directly to the County DA Unit who is ultimately the end-user of this information/data. Regular training is required to ensure staff turn-over and programmatic updates are addressed, but this exercise provided over 20 partners the opportunity to learn how/where to submit damage assessment data.
- *Strength #2.1.3 - County EOC Damage Assessment Unit established RDA Management Information System for receiving and disseminating submitted data.* Staff collectively discussed how to overcome initial issues with setting up and accessing systems, including work with the GIS team, to find solutions and move forward effectively with the data receiving process.

Area(s) for Improvement

- **[County-Wide Comment]** *Area for Improvement #2.2.1: Data collection formats need to be standardized county-wide.*
 - Reference: External Participation Finding
 - Analysis: Data was submitted in a number of formats, including Survey123, spreadsheets and PDFs. The lack of standardization in submission types created a number of challenges, including data received with unique information entered into non-standard customized fields from various submitters, and different levels of RDA hazard identification. This presented a challenge in integrating data into the GIS map. Consider designing methodology for standardized prioritization of locations damaged.

Possibility of batch upload of data into GIS system if data fields match. However, most need to be hand entered by EOC. All data from PDF submissions needed to be hand entered by EOC. Improvement needed on address data entry and explanation of requirements.

There was interest in further determining how “confidential” information regarding assessments would be addressed within the current structure of assessments. Are there data being collected by the County that are confidential and would require the entire DA information to be restricted in viewers?
- **[County-Wide Comment]** *Area for Improvement #2.2.2: Submitters currently do not receive notice their data has been viewed, received, and integrated.*
 - Reference: External Participation Finding
 - Analysis: Whether via the GIS Tool, the Organizational RDA Form, or other submission method, submitters were unclear about the status of their submitted assessments. Exercise players shared they were unclear if their assessments had been received by the County EOC, or if the data they submitted was what they County was seeking. The County EOC needs to establish some type of notification process so that submitters are aware their data has been received and reviewed. In addition, ability to edit entry after submission would be a benefit
- **[Internal County Comment]** *Area for Improvement #2.2.3: Integration of non-GIS RDA data into the GIS system needs to be improved.*
 - Reference: Objective #2, Capability Target #1
 - Analysis: Multnomah County needs to ensure there is a back-up method for compiling damage assessment data beyond a digital/internet-focused product. This back-up tool needs to be designed in a way that can be integrated easily into a mapping/GIS tool once those systems become available. During the October 20th Exercise, the EOC GIS Unit realized incoming data being included in the Multnomah County “Organizational RDA Report” was unable to be mass uploaded to the GIS system due to separate naming/title conventions. This

required the EOC DA Unit and GIS Unit to spend significant amounts of time individually uploading incoming RDA assessments, crucial time that should not be spent during real-world activations. Drop down address input was not a logical process. There is no standardized way of submitting damage assessments (outside of ATC20 forms) this could pose a problem when receiving assessments from various outside entities. Getting data inputs as a PDF makes it difficult to scrub data out of it as PDFs are essentially pictures, not documents. Takes more work/time to synthesize data out of certain formats such as PDF.

Objective 3 - RDA Collection and Management within County EOC

Multnomah County will collect and manage the incoming Rapid Damage Assessment information and data in the County Emergency Operations Center in response to a 5.5 magnitude Portland Hills Earthquake event within six (6) hours of StartEx.

Core Capability: Operational Coordination

Strength(s)

- *Strength #3.1.1 - The County EOC was able to develop a visual tool of damage assessments.* The intent of this exercise was to see how well the County and our partners could collect, distribute, and manage RDA assessments in a 6-hour exercise. Within the time the County EOC was able to implement a GIS Visual Map that tracked both simulated and real-time incoming data - this was a big success. There are aspects of this tool that need updates (see below), but overall the County EOC was able to implement a visual tool that would benefit situational awareness in a real-world incident.
- *Strength #3.1.2 - The County EOC was able to develop a DRAFT Damage Assessment Situation Report.* During a real-world emergency, the extent of damage will need to be shared with local leadership and our local partners for situational awareness. As part of this exercise, the County EOC developed DRAFT information and data that could be integrated with a larger Situation Report for both those partners. This tool included both data, visuals, and graphs and was created with limited initial guidance from the DA Unit position description. The development of this DRAFT product will help refine future versions, and was a huge success as part of this exercise event.

Area(s) for Improvement

- **[County-Wide Comment]** *Area for Improvement #3.2.1: Internal and external partners do not currently have the ability to update submitted damage assessment reports.*
 - Reference: Objective #3, Capability Target #1
 - Analysis: The first version of the County GIS Damage Assessment Tool does not currently have the capability to update previously submitted assessments by external or internal partners at this time. This capability needs to ensure previously submitted data could be adjusted, and future assessments on similar infrastructure can be efficiently integrated into existing data/information the county has. One of the exercise players asked if an assessment location previously submitted was determined to be incorrect, how would that be remedied after the fact - there currently is no process to address that other than the EOC GIS Unit.

This is also relevant to a non-GIS tool, as partners would need to re-submit their Organization RDA Report (or other tool) with the updated information - and this process puts the responsibility on the County GIS Unit solely.

- **[County-Wide Comment]** *Area for Improvement #3.2.2: County Damage Assessment Tools need to have the ability to be accessed and used during future assessments (Initial Damage Assessments/Preliminary Damage Assessments).*
 - Reference: Objective #3, Capability Target #1
 - Analysis: The County DA Tools also need to ensure next the following phases of damage assessments (Initial Damage Assessment and Preliminary Damage Assessment) can access the submitted data. This is relevant to both a GIS Tool and/or non-GIS Tool. Building Safety Evaluators need to be able to access submitted RDA data and potentially use these tools to complete their assessments to ensure DA information is maintained in a limited number of locations. If this is not the case, further damage assessments will be conducted and documented via separate tools and then would have to be synthesized and submitted through the County EOC. This would significantly increase the complexity and time-frame for conducting these operations.
- **[Internal County Comment]** *Area for Improvement #3.2.3: Additional guidance on the expectations for Damage Assessment Situation Report information is needed.*
 - Reference: Objective #3, Target Capability #3
 - Analysis: This aspect of the exercise was designed to validate the process for developing a written summary/report for County Leadership regarding the extent of damage - this process had never been tested before. The EOC DA Unit shared additional clarity is needed on how to prioritize information for leadership in a Damage Assessment Situation Report format.

Exercise Design and Conduct Feedback

Strength(s)

- Accelerated Timeline Positively Influenced Partner Play: Participants shared they appreciated a shorter Exercise Series timeline. A longer/more usual timeline may have included too big a gap between engagement, causing actions or tasks to potentially be set aside, and maintain internal momentum with busy partners.

Area(s) for Improvement

- Planning Team Communication (Planning Meetings & Coordination) Expectations: Emergency Management exercises follow the Homeland Security Exercise and Evaluation Program that outlines the necessary meetings to ensure a successful event. Participants expressed concern over the frequency of engagement with this effort, something the MCEM needs to make sure is addressed in future exercise events. While these events are significant lifts and require many details, it is crucial to ensure the Planning Team Members are not burdened by the amount of engagement.

Some participants shared they felt constrained to participate with the likelihood of missing certain meetings or events - setting expectations early in the process would help participants engage as much as possible.
 - Recommended Action: The MCEM could discuss anticipated meetings and communication with the Planning Team during future kick-off meetings.
- Planning Meeting Schedule Established Earlier in Process: Participants encouraged the Planning Meeting Schedule be set in advance of the series to set expectations of time/effort required for their involvement. Whether at prior to or during the kick-off meeting, a Planning Meeting Schedule should be established earlier.

APPENDIX A: EXERCISE SCHEDULE

Agenda Item	Timeframe
Registration	0800 – 0845
Exercise Briefing	0845 – 0900
Start Exercise (StartEx)	0900
Exercise Play (Varying Based on Organization)	0900 – 1430
End Exercise (EndEx)	1400
Section Hot Wash	1400 – 1415
Event Hot Wash	1415 – 1500

Table 2. Exercise Schedule

APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations	Type of Participation
Multnomah County	
Office of Emergency Management (MCEM)	Participant
Department of County Assets (DCA) – Facilities	Participant
Department of County Assets (DCA) – Geographic Information Systems	Participant
Department of Community Services (DCS)	Participant
Municipalities	
City of Gresham – Emergency Management	Participant
City of Gresham – Fire Department	Participant
City of Portland – Bureau of Emergency Management	Independent Tabletop
City of Portland – Bureau of Transportation	Independent Tabletop
City of Portland – Bureau of Environmental Services	Independent Tabletop
City of Portland – Parks & Recreation	Independent Tabletop
City of Portland – Water Bureau	Independent Tabletop
City of Portland – Fire & Rescue Bureau	Independent Tabletop
City of Troutdale	Participant
Sauvie Island Fire Department	Simulated Assessments
Regional Partners	
Metro	Simulated Assessments
Pacific Power	Participant
Northwest Natural	Participant
Federal Executive Board (FEB)	Simulated Assessments
Multnomah County Drainage District (MCDD)	Participant
Vibra Specialty Hospital	Participant
Health Preparedness Organization (HPO)	Simulated Assessments
University of Portland	Simulated Assessments
Portland State University (PSU)	Simulated Assessments

Participating Organizations	Type of Participation
Lewis & Clark College	Simulated Assessments
Reynolds School District	Simulated Assessments

Table 3. Exercise Participants

APPENDIX C: IMPROVEMENT PLAN

Objective	Area for Improvement	Timeline	Capability Element	Responsible Organization
O1 – Field Assessments & Damage Assessment Unit Implementation	Data collection within the field assessment tools is currently too focused on buildings	Short-Term (Summer 2023)	Planning	<i>MCEM-Operations</i>
	Severity of Damage Categories needs to be standardized county-wide.	Short-Term (Summer 2023)	Planning	<i>MCEM-Operations</i>
	County Organizational RDA Report Needs Revision for Improved Partner Understanding	Short-Term (Summer 2023)	Planning	<i>MCEM-Operations</i>
	Additional topic-specific guidance, operating procedures and training is needed for the County Damage Assessment and Geographic Information Systems Units.	Mid-Term (January 2024)	Planning	<i>MCEM-Operations</i>
	Multnomah County needs to identify who will staff the EOC DA Unit.	Mid-Term (January 2024)	Organization	<i>MCEM-Operations</i>
	Majority of RDA field assessment capabilities and tools are not currently developed or active with focus on local partner use and responsibilities.	Long-Term (Summer 2024)	Planning	<i>ALL Partners</i>
O2 - Submitting Information and Data to County	Submitters currently do not receive notice their data has been viewed, received, and integrated.	Short-Term (Summer 2023)	Planning	<i>DCA-GIS</i>
	Data collection formats need to be standardized county-wide.	Mid-Term (October 2023)	Planning	<i>MCEM-Operations</i>
	Integration of non-GIS RDA data into the GIS system needs to be improved.	Mid-Term (October 2023)	Planning	<i>County EOC Planning</i>
O3 - RDA Collection and Management within County EOC	Additional guidance on the expectations for Damage Assessment Situation Report information is needed.	Short-Term (Summer 2023)	Planning	<i>MCEM-Operations</i>
	Internal and external partners do not currently have the ability to update submitted damage assessment reports.	Long-Term (Summer 2024)	Planning	<i>DCA-GIS</i>
	County Damage Assessment Tools need to have the ability to be accessed and used during future assessments (Initial Damage Assessments/Preliminary Damage Assessments).	Long-Term (Summer 2024)	Planning	<i>MCEM-Operations</i>