

HayWired Scenario FACILITATOR TOOLS

Payroll

Planning & Preparedness

Discussion Guide

Version 1.0



Facilitator Tool: Payroll

This Facilitator Tool is a companion document to the HayWired Scenario Exercise Toolkit. It provides additional guidance and support material for leading a discussion-based exercise focused on planning for running payroll in a post-earthquake environment using the HayWired Earthquake Scenario.


Discussion Objective: Identify how a major earthquake could disrupt our organization's ability to process payroll and maintain compliance with pay, timekeeping, and leave requirements.

Discussion Scenario: Two weeks ago, a magnitude 7.0 earthquake struck the Hayward Fault with an epicenter in Oakland, CA. In the aftermath, someone realized payroll needed to be run. Payroll processing attempts repeatedly failed for several days. As aftershocks continue, our team has come together to reflect on what went wrong, identify critical vulnerabilities, and strengthen contingency plans for future payroll disruptions.

Issue for Discussion: Payroll obligations do not stop after a disaster. In addition to the challenges of processing payroll, organizations must also be able to accurately track time worked, overtime, and leave, while staying compliant with labor laws and contracts.


Information from HayWired Scenario Report


The following information from the HayWired Scenario Report provides additional context for this discussion. The volume, chapter, and page information (Vol, Ch, p) is included so that you can find more details, if desired.


Visuals such as maps, charts, and figures are available for some of the information (marked with ) and can be used to further support your discussion. These visuals can be found both in PDF and PowerPoint slide deck formats at EarthquakeCountry.org/haywired.

Please keep in mind that while this information is based on a plausible scenario built on extensive research and expertise, a real event may unfold differently. Changes in the location of the epicenter, extent of fault rupture, variations in shaking intensity, details of actual buildings and their occupants, and mitigation measures taken since the Scenario was created can change the damages and impacts.

Network Functionality: Damage to infrastructure, power outages, and surges in demand will limit network functionality for voice and data services after a large earthquake (Vol 3, Ch S, p 59-60).

 **Voice & Data Restoration Timeline:** The Scenario's optimistic estimate, using batteries and/or generators and deploying portable equipment, is that voice and data demand could be satisfied in the least affected counties within a few days and within a week in the other counties except for Alameda County, the most affected county. Alameda County suffers from compounding factors of the most damage to telecommunications infrastructure, slowest electric power restoration, and longer times for trucks to enter to deliver fuel for generators and portable equipment (Vol 3, Ch S, p 71).

 **Data Centers:** 55% of the data centers in the region are exposed to at least moderate shaking (Vol 3, Ch T, p 133) and 67% are exposed to multiple hazards including ground shaking, liquefaction, and fire hazards (Vol 3, Ch T, p 135). The largest capacity loss for data centers is in San Francisco, San Mateo, and Santa Clara counties since they have the highest concentrations of data centers (Vol 3, Ch S, p 62).

 **Power:** In the HayWired Scenario, electric power outages are estimated to affect about 2 million customers throughout the Bay Area with restoration estimated to take days in the less affected counties to weeks in the more affected counties (Vol 3, Ch S, p 79).

Individuals to Consider Including in the Discussion

Who you include in your exercise should be determined by who can add value to the discussion. This could include key information about your organization's facilities, vulnerabilities, plans/policies/practices, etc. The size of the group will also influence the quality of the discussion; in a large group important points may be lost, while a small group may not have the needed information.

Consider including person(s) with knowledge of/responsibility for:

- human resources
- payroll provider
- union representation
- emergency management and/or business continuity planning

Suggested Questions for your Discussion

Depending on who is participating and how long you have, you may decide to use all of these questions or only a few. The list of questions is not all inclusive and you may decide to adapt some to better fit your organization. An in-depth discussion of just a few questions may have more value than covering and only scratching the surface of many questions.

Discussion questions related to processing payroll:

- What were the most likely causes of the payroll processing failures in this scenario?
- What financial pressures (e.g., delayed receivables, uninsured losses, reduced cash flow) might limit our ability to make payroll after an earthquake?
- What external dependencies (e.g., banks, payroll vendors, payment processors) could create vulnerabilities?
- What infrastructure (e.g., power, internet, phone systems, secure servers) is essential for payroll, and what redundancies exist?
- How many staff members have the knowledge, access, and authority to run payroll if primary staff are unavailable?
- From where can payroll be securely processed (on-site, remote, vendor-supported)? What information, credentials, and security protocols are required?
- What proportion of employees receive paper checks versus direct deposit? For paper checks, are they typically distributed in person or mailed?
- How will disruptions to payroll disproportionately affect employees without bank accounts or those relying on check-cashing services?
- What processes are in place to quickly and securely update employee addresses if they relocate temporarily or permanently after the earthquake?

- What are our existing contingency plans if payroll cannot be processed normally? What gaps does this scenario reveal?
- How can we communicate clearly with employees about payroll status, delays, or changes in process during disaster recovery?
- What measures can we take to support vulnerable employees who may be most affected by delays in receiving pay?

Discussion questions related to tracking time worked, overtime, and leave:

- What infrastructure (e.g. power, internet, phone, etc) is needed to track time worked, overtime, and leave?
- How might the earthquake affect our internal systems and procedures for tracking time worked, overtime, and leave?
- Are there existing policies on pay and leave during disasters? Do these differ for exempt vs. non-exempt employees?
- How many people in our organization understand the legal and regulatory requirements for payroll, hours worked, and leave?
- If employees are unionized, what do labor contracts stipulate about pay and leave during and post disaster?

Additional Elements to Consider

Here are some additional factors and variables you may want to take into account during your discussion.

- **Cybersecurity Risks:** Payroll systems may be targeted during periods of disruption, requiring secure authentication and fraud-prevention measures.
- **Employee Morale and Retention:** Payroll delays can directly impact trust and employee retention.
- **Mail Delivery Disruptions:** Employees receiving paper checks may face delays due to damaged postal facilities or rerouted delivery systems.
- **Employees without Bank Accounts:** Not everyone has a bank account and some individuals rely on check cashing services. After an earthquake check cashing services may be disrupted due to building damage, technology disruptions, or utility outages.
- **Access and Functional Needs Considerations:** The California Office of Emergency Services identifies individuals with access and functional needs as individuals who are or have: physical, developmental or intellectual disabilities; chronic conditions or injuries; limited English proficiency; older adults; children; low income, homeless and/or transportation disadvantaged (i.e., dependent on public transit); and pregnant women. Learn more at <https://www.caloes.ca.gov/office-of-the-director/policy-administration/access-functional-needs/>