Plan for a Resilient Oregon

Statewide Resilience Forum Agenda*

February Meeting – 2/18/26

1:00pm – 3:00pm

Register for the Zoom meeting:
https://us06web.zoom.us/meeting/register/XMAFVZYgSwa-WBnX4X1ySg

1:00	Welcome & Introductions	Jonna Papaefthimiou, Chief Resilience Officer
1:03	Agenda Review & Logistics	Jonna P.
1:05	PRO Project Timeline Review	Jonna P.
1:10	Presentation: *Oregon's Natural Hazard and Resilience Planning Landscape* Preliminary Review Draft	Michael Howard, University of Oregon
1:45	SRF Member Questions & Discussion	Jonna P. & Michael H.
2:00	Break	
2:10	Local Perspective: Regional Resilience Forums discussed local plans in their monthly meetings	5 Regional Facilitators
2:25	Regional Resilience Forum Updates	5 Regional Facilitators
2:50	Meeting Wrap-up - Summarize meeting outcomes - Actions to take before next meeting	Jonna P.
3:00	Adjourn	

A reminder to pre-register to get the Zoom information: Webinar Registration - Zoom.

The members of the Statewide Forum are panelists. Members of the public viewing the meeting are "attendees". Please take the post-meeting survey. Your input and suggestions are very important to us.

Find out more about the PRO at: Governor of Oregon : Plan for a Resilient Oregon : Policies : State of Oregon

*DRAFT agenda: subject to change before meeting. Updates will be posted.

PLAN FOR A RESILIENT OREGON STATEWIDE RESILIENCE FORUM

Meeting 4: January 21, 2025

Via Zoom

Attendance:

Statewide Resilience Forum Members:

Northwest Region Facilitators: Debbie Cabrales, Centro de Servicios Para Campesinos; **Eastern Region Facilitators:** Chantal Ivenso, Northeast Oregon Economic Development District; **Southern Region Facilitators:** Tessa Elbettar & Matthew Havniear, Jackson County Long Term Recovery Group; **Portland Metro Facilitators:** Xitlati Torres, Verde **Central Region Facilitators:** Christina de la Torre & Metzin Rodriguez, Unite Oregon; Marina Denny, OSU Extension Service; Tim Dooley, Association of Oregon Counties; Ed Flick, Oregon Department of Human Services; Gabriela Goldfarb, Oregon Health Authority; Kirstin Greene, Oregon Department of Land Conservation and Development; Ali Hansen, Oregon Department of State Lands; Patence Winningham Natasha Fox, Oregon Department of Emergency Management; Maxwell Woods, Oregon Department of Energy. Scott Winkles, League of Oregon Cities; Paris Edwards, Oregon Department of Transportation; and Scott Burwash, Assistant Director of Programs Disaster Recovery Resilience Division Oregon Housing & Community Services

University Research Team: Josh Bruce, University of Oregon: Oregon Partnership for Disaster Resilience; Mike Howard, University of Oregon: Oregon Partnership for Disaster Resilience; Erica Fleishman, Oregon State University Oregon: Climate Change Research Institute; Alyssa Cody, University of Oregon Graduate Student; Willow Vero, University of Oregon Graduate Student

PRO Staff Team: Jonna Papaefthimou, Oregon Chief Resilience Officer; Erik Cole, Oregon Statewide Resilience Plan Manager; Aimee Fritsch, Oregon State Resilience Plan Coordinator; Blake Stroud, Oregon Housing and Community Services, Senior Policy Advisor, Disaster Recovery and Resilience

1. **Welcome &Introductions – Jonna Papaefthimou, Oregon State Resilience Officer**

   SRF participants and the public were invited to introduce themselves in the chat.

2. **Agenda Overview & Logistics – Jonna Papaefthimou, Oregon State Resilience Officer**

   Brief overview of agenda and meeting logistics. Audio dialogue is limited to panelists; the public are welcome to participate via chat or provide input via the survey.

3. **Table of Contents Update Discussion – Jonna Papaefthimou, Oregon State Resilience Officer**

   Updated table of contents was sent out in the meeting packet. Some feedback from the last meeting was at the detail level, these points are not shown in the updated TOC but it will be featured in the plan.

   At this point updates include:

- Updated executive summary
- Clarifying how PRO is different than the NHMP, while also complementing the work
- Partnerships across the state
- Accountability metrics
- Explanation of drivers of change
- Jonna noted that each region is unique, but at this time the PRO Team is not sure how strategies will be organized

Xitlali Torres: When will the strategies be released for review?
> **Jonna**: Next month the Forum will discuss local plans, then discuss focus groups and interviews. These inputs will help shape the strategies. Ideally, by May strategies will be discussed as a group.

4. Drivers of Change Discussion – Erica Flieshman, University Research Team

Erica: Goal of today is to revisit last month's discussion and expand on the conversation. Each Forum member should have received an updated list of drivers in the six areas of focus in the meeting packet. At the end of the meeting, Forum members will be asked to select two drivers that they believe will be the most consequential or influential.

Chantel Ivenso: Should we consult our regional forum members?
> **Erica:** It is up to you

Erica introduces the next steps for selecting and studying drivers of change after Forum members submit the pairings.

Evaluate dependence between drivers: Characterize the strength between each pair of drivers, how do they interact? How strongly? Which drivers are passive vs active?

> **Tessa Elbetter:** are we evaluating the dependence when we submit?
> **Erica:** No, we do not have the time unfortunately. The research team will characterize and share back.

Project future states of drivers: What is the probability of drivers occurring? What conditions will be assumed with the drivers?

Perform consistency analysis: Can these drivers logically occur together? Some may not occur at the same time.

Select and describe scenarios: Create plausible futures that include quantitative and qualitative elements. This will help to understand if the scenario is likely or not. This step acts as a reality check.

> **Gabriela Goldfarb:** Will each pair get 3-5 scenarios? (see slide)
> **Erica:** We will develop scenarios for the highest priority drivers from the previous steps.

Debbie Cabrales (chat): So just to confirm the forum members will have to come up with the scenarios depending on the drivers?
Erica: No, members are only responsible for 2 drivers.
Tessa Elbetter: How is plausibility determined?
Erica: Literature, interviews, public discussion, can come from a wide variety of sources. Goal is to have a wide range

Specify Policies: Based on the drivers of change scenarios, select polices (strategies) that are flexible to changes.

Stress-test the polices: Evaluate each policy (strategy) against each scenario. The goal is to identify policies that will advance resilience.

Discussion:

Xitlali Torres: The flow is still a bit unclear; it is difficult to consider drivers before strategies.
Debbie: Echoes Xitlali's comment about structure

Erica: There is pairing occurring. We must understand the complexities of future states. Using drivers of change and alternative futures, we can test the proposed strategies. We can design the drivers of change and the strategies simultaneously since it is possible to test them against one another.

Cristina De La Torre: It seems like it would be helpful develop the drivers if a list of plan goals was already proposed. Have we set up any goals for PRO yet?
Erica: PROs goals should align with the definition of resilience used in the plan. The strategies are emerging from a variety of methodologies that are currently underway. There are also a wide variety of ways the world could develop in the future, so the plan must be flexible.
Jonna: Our world includes many unpredictable situations; this exercise works to test strategies against the uncertainties of the future. By testing strategies against uncertain futures, it will help to increase robustness.
Erica: Drivers are not intended to be entirely negative.

Erik: If we had done this exercise 3 years ago, would we have made the predictions we are currently experiencing?
Erica: Many yes, climate, population changes etc. would have occurred in any political condition.

Xitlali Torres (chat): How does the framing of "people-centered" effect this part of the work?
Erica: Many of the themes are tied to people, hopefully the strategies tested against the futures will also be very people centered.

Chantal Ivenso: Are we going to review plans that have gone through this process at the next meeting?
Erica: No, but may be able to provide an example.

Erica makes a final note about software that will be used to make comparisons and analysis.

BREAK

5. **Regional Resilience Forum Updates –** 5 Regional Facilitators

Southwest Region (Tessa Elbettar): For the Drivers of Change discussion, our group struggled to consolidate and prioritize from the list provided. Many said they would feel more confident identifying drivers if we knew the strategies already. They've already hosted several events (Rogue Center Fall Festival, LTRG COAD hosted tabletop exercise, Food Solutions Summit) and have several more upcoming (focus groups, tabletop exercises to practice using ham radio, etc.). In March, we plan to do regional asset mapping.

Central Oregon Region (Metzin Rodriguez & Cristina de la Torre): At January meeting, discussed updates from events already held and ideas for upcoming events. One event had over 120 attendees, with many more scheduled for this month. We created a regional tracker so we can collaborate and keep up with each other's events. For future meetings, we want to understand how communication can work better if signal and electricity is out—especially for households that speak other languages primarily. During the Drivers of Change discussion, we found our region has a lot of internal agreement. We talked about political and social drivers primarily. Some of the strategies that surfaced include disaster resilience and mitigation fund at the state level, fund by taxing industry with biggest emission impacts; build redundant, low-tech comms systems that function without internet; push programming policies and plans to commission and committee levels that are less susceptible to political shifts.

Portland Metro Region (Xitlali Torres): For the Drivers of Change discussion, we discussed wildfires, pandemics, food and land access/availability, challenges between regenerative vs traditional agriculture, political/social drivers like less reliance on federal agencies and threats to marginalized identities. We also looked at cyber-attacks, consequences of AI regulation or lack thereof, etc... Many of our regional members are weaving in resilience activities to their existing cultural programming. Upcoming engagement include a market, a weaving activity, a dancing for resilience event, a Pan African snow day/fishing day. We also discussed the need to diversify our generational outreach in addition to geographic. Our region expressed interest in capacity building around transportation in emergencies, funding security, case studies on activating emergency response between governments and NGOs, and earthquake preparedness.

Northeast Region (Chantal Ivenso): Most people like the Drivers of Change tool okay. It would be helpful to test drive the tool at the facilitators meeting first prior to the regional meetings to give the facilitators more preparation. Our region used the multiples system to crosscut multiple themes: unreliable broadband services, lack of legal representation, strain on formal support networks, youth representation, etc. emerged as the main concerns. Many groups have started activities; others are still brainstorming. A lot of our events occur after the April deadline, so many groups are struggling to find new ways to fit engagement in before then. We are gathering a diversity of respondents in our engagement efforts—rural, tribal, youth, elderly, etc. We brainstormed how to have a research activity during an emergency response training. Professional development ideas—is there a way to compensate professionals for providing their expertise if they are not formally apart of the SRF?

Northwest Region (Debbie Cabrales): Our region wanted to keep all the drivers rather than vote/prioritize. Our group prefers to vote after the research team reviews the data and shares it back with us. There were no reports of upcoming events. We did generally discuss opportunities to collaborate across the county, implications of federal funding cuts, and learning how to create alignments within our region and across Oregon. Beyond Toxics hosted an event at MLK Day and received great participation on the dot survey.

6. Update on Local Plan Review – Mike Howard, University Research Team

The University team is looking at NHMPs, CWPPs, as well as other types of plans (resilience, heritage, recovery, economic, estuarine, etc.) across the state of Oregon. If you want to see the list or add other plans for us to review, reach out to Erik Cole (erik.cole@oregon.gov). We are analyzing these plans based on a variety of metrics like collaboration, engagement, actions and strategies, and implementation. The research team will present findings from the plan review at the February SRF meeting.

7. Resilience stories/ Narrative Project with Oregon Humanities - Josh Bruce, University Research Team

Next week, we'll push information to CBOs to engage in the storytelling process. Oregon Humanities has a podcast called This Place that features short-format stories (about 4 minutes). Over the next six months, they'll be collecting resilience stories that will feature on a 'Resilience' segment of their podcast, as well as in the public-facing version of the PRO. Each region can nominate 5-10 folks from your region with a compelling story/relationship to resilience. Oregon Humanities will also provide a training on February 20th if you want to learn how to record the stories yourself. This training will be recorded if you can't make it live. Oregon Humanities will also provide a toolkit to support CBOs in the story gathering process. Gabriela Goldfarb from OHA noted that they already have many resilience stories published throughout their platforms.

8. Meeting Wrap-Up – Jonna Papaefthimiou, Oregon State Resilience Officer

Please complete the [post-meeting survey](). Keep an eye out for next steps on Drivers of Change in your inbox. The PRO team will also follow up on a request to share the calendar of regional events.

Oregon's Natural Hazard and Resilience Planning Landscape

Review of Local Natural Hazard and Resilience Related Plans in Oregon

PRELIMINARY REVIEW DRAFT

February, 2026

Oregon faces a growing and evolving set of natural hazard risks, from wildfire and drought to flooding, coastal erosion, and the long-anticipated Cascadia Subduction Zone earthquake. Yet the State's current system for natural hazard and resilience planning is decentralized and highly variable. Local, regional, and state entities each produce their own plans (Natural Hazard Mitigation Plans, Community Wildfire Protection Plans, climate and energy strategies, estuarine and coastal resilience plans, long-term recovery plans, and more). Collectively, these plans contain the most comprehensive picture of how Oregon communities understand risk, articulate priorities, and identify needed resilience actions. But until now, the State has not had a consistent, statewide view of what these plans include, where gaps exist, and how implementation occurs.

This white paper summarizes a review of over 100 natural hazard and resilience-related plans across Oregon. The Plan for a Resilient Oregon Research Team used a consistent coding method to analyze goals, actions, equity considerations, collaboration structures, implementation practices, and cross-plan integration. The intent of this assessment was not to score or rank jurisdictions but to document what exists across Oregon's planning ecosystem and to identify patterns that can inform a statewide resilience strategy.

Across plan types, several statewide themes emerge. First, **resilience goals and actions are abundant**, especially in hazard-focused plans like NHMPs and CWPPs. These plan types tend to include the largest action inventories and the clearest implementation details. Climate and specialized plans offer more people-centered strategies and stronger equity content but may lack timelines, prioritization, or budget information. Second, **collaboration and community engagement vary widely**. NHMPs and CWPPs benefit from federal requirements that drive robust partnerships, whereas climate and other plans show more variability in who participates and how input is used. Engagement across Oregon remains heavily survey-based, with limited use of deeper community-driven approaches and inconsistent documentation of language access or public influence on final plan content.

Equity appears inconsistently across plans. Climate and specialized plans scored higher on metrics associated with identifying vulnerable groups, including implementation metrics, and incorporating community-based organizations or Tribes into governance structures. In contrast, NHMPs and CWPPs

generally included fewer specific references to vulnerable groups and incorporated few to no equity focused metrics, budget commitments, or structures for ongoing accountability.

Across all plan types, the analysis reveals a shared statewide challenge: **many plans lack the foundational elements needed for implementation-ready action**. Few include explicit project deadlines, formal budget estimates, or measurable success metrics, even when actions and responsible parties are identified. This inconsistency could make it difficult for the State to assess readiness, coordinate resources, or track progress across jurisdictions. However, the review also shows that hazard and resilience related plans in Oregon share at least some alignment in the kinds of actions they propose. For example, there is a clear focus on updating plans and regulations, investing in natural systems, strengthening public education, and improving critical infrastructure.

Taken together, **the findings appear to support the need for a more consistent, statewide resilience planning framework.** For example, support for clear action ownership, prioritization, timelines, funding pathways, and success indicators could improve cross-plan alignment, strengthen accountability, and enable the State to better support and resource resilience work across Oregon.

Purpose of the White Paper

This white paper summarizes a coded plan review dataset encompassing 110 resilience-related plans across Oregon. The purpose of the paper is to document what resilience content currently exists across local, regional, and state plans in Oregon that are related to natural hazards or resilience. IPRE conducted this assessment to provide the State with (1) a compiled, categorized, and descriptive inventory of plans related to natural hazards or resilience (2) analysis of resilience related goals, objectives, and actions contained therein, (3) an assessment of plan implementation approaches, and (4) a summary of plan implementation responsibilities. Our approach also provides a consistent method for identifying what content currently exists across varying plan types, regions, and jurisdictions. The purpose of this review is not to score or evaluate jurisdictions, but to document and clarify which resilience components are present, how they appear, and where key sections, such as collaboration, engagement, equity, hazards, actions/mitigation strategies, and implementation are addressed or missing.

Because the analysis draws exclusively from plan-level coding (not surveys or interviews) it captures what is explicitly written in each plan. The research team analyzed the summary (open-ended narrative) field for each review category (collaboration, community engagement, equity, implementation) and then synthesized the findings to illuminate cross-cutting statewide patterns.

Introduction

Background

Oregon faces a diverse and evolving set of natural hazards. These include wildfire, flooding, drought, landslides, winter storms, coastal hazards, and the catastrophic threat of a Cascadia Subduction Zone earthquake and tsunami among others. These hazards vary widely across the state's geography, from fire-prone forests to flood-affected river basins and vulnerable coastal zones. The 2025–2030 Oregon Natural Hazard Mitigation Plan (NHMP) emphasizes that reducing these risks requires coordinated, long-term planning grounded in local conditions and community needs.[1] Chronic coastal hazards such as erosion and storm surge are also intensifying, compounded by relative sea-level rise and the high likelihood of tsunami-generating seismic events along the coast.

Because hazard exposure varies significantly across regions, local and regional plans play a critical role in Oregon's overall resilience framework. Local Natural Hazard Mitigation Plans (NHMPs), Community Wildfire Protection Plans (CWPPs), climate-focused plans, estuarine resilience action plans, Comprehensive Economic Development Strategies (CEDS), community smoke response plans, energy plans, and long-term recovery plans each capture different components of natural hazard related risk, vulnerability, and needed action. Taken together, they can form the State's most complete picture of how communities understand their hazards, where key vulnerabilities lie, and what preparation, mitigation, and recovery strategies are already in place.

Importance of integrated planning

Hazard risks cut across every sector of community life, affecting housing, transportation, utilities, economic activity, health, and public safety. Because natural hazards often interact with or compound one another, planning efforts can be coordinated so that mitigation actions, climate adaptation strategies, and economic development priorities are mutually reinforcing rather than siloed. Figure 1 shows the hazards profiled across the reviewed plans by plan type. NHMPs identify the greatest number of hazards because they follow the standard, state-defined hazard list, which requires jurisdictions to assess a broad and consistent set of risks, resulting in more hazards being documented compared to other plan types. The "Other" hazards capture a wide range of non-standard or locally specific risks not covered by typical hazard categories, including dam failure, pandemics and emerging infectious diseases, hazardous materials incidents, utility or communication system failures, cyberattacks, and water-quality emergencies; alongside environmental threats such as harmful algal blooms, saltwater intrusion, hypoxia, sea-level rise, ocean acidification, storm surges/King Tides, dust storms, invasive species, weed/pest issues, expansive soils, and declining pollinator populations. Some plans also identify climate-related or compounding hazards (such as severe weather, tornadoes, electricity outages, or Southern Oscillation–related impacts) reflecting jurisdiction-specific vulnerabilities and emerging concerns beyond the standard hazard set.

Linking, leveraging, and aligning plans can also promote resilience strategies that are more efficient, cost-effective, and strategically targeted. Economic development plans (such as CEDS), for example, identify critical industries, infrastructure needs, and regional vulnerabilities that directly overlap with hazard exposure, especially in wildfire-prone, flood-impacted, and coastal regions. Better coordinating

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[1] Oregon Department of Emergency Management, & Oregon Department of Land Conservation and Development. (2025). *2025–2030 Oregon Natural Hazard Mitigation Plan*. https://www.oregon.gov/oem/emresources/Plans_Assessments/Pages/hazard-mitigation-planning.aspx

hazard mitigation with climate adaptation and economic planning could help communities prioritize investments that reduce long-term loss, protect key economic sectors, and stabilize essential services.

Finally, alignment is often associated with more defined implementation structures and funding readiness. State and federal programs increasingly require that climate, resilience, land-use, and economic plans show clear linkages. When plans reinforce one another -- for example by using consistent hazard data, shared priorities, and coordinated actions -- communities are often better positioned to compete for grants, improve permitting and capital planning processes, and ensure that resilience strategies benefit residents most vulnerable to hazard impacts. In summary, integrated planning approaches can reduce duplication, avoid conflicting actions or policies, and support partnerships across local governments, special districts, and community-based organizations (CBOs).

Figure 1 Profiled Hazards by Plan Type
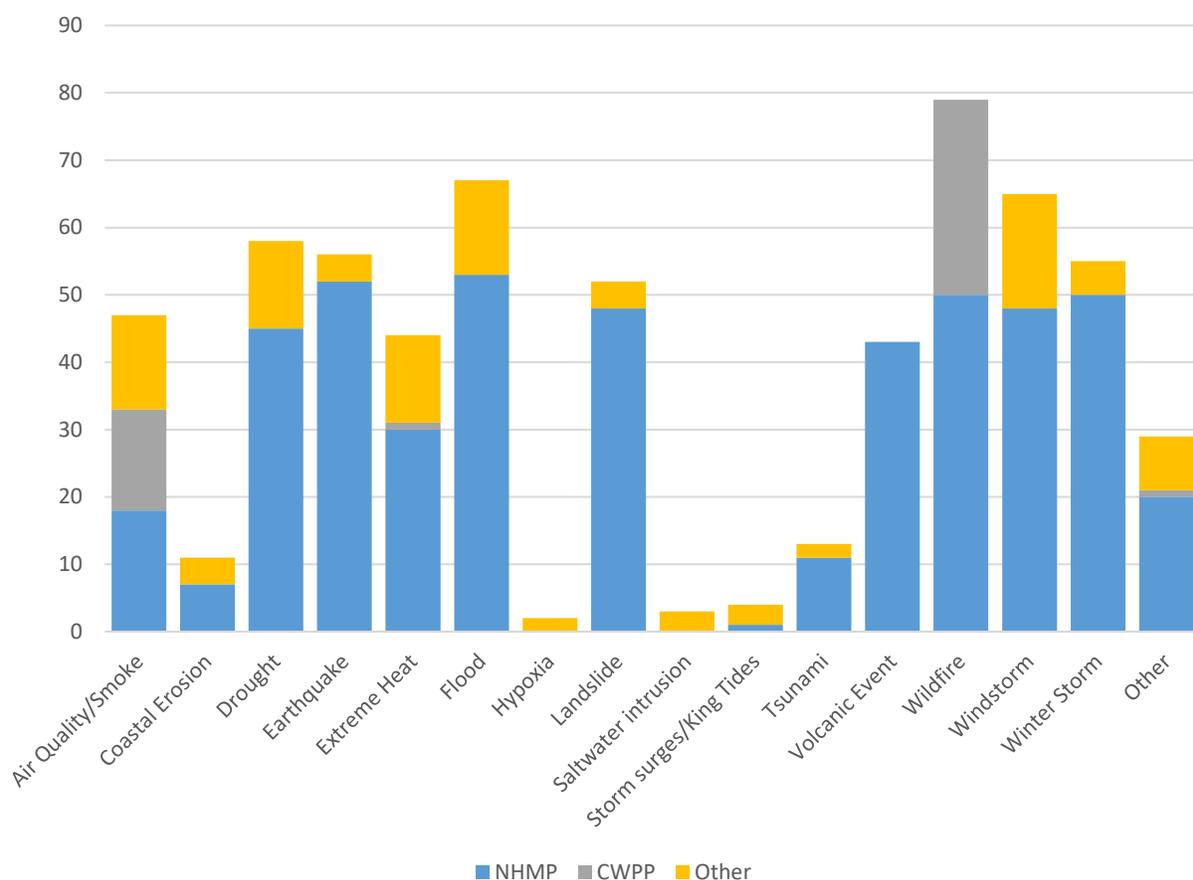
Source: Local Plan Content Analysis (2026)

Methodology

The PRO Research Team based this plan review on a dataset of 110 resilience-related plans from across Oregon. To identify high-value plans in use by practitioners, we solicited recommendations from the State Resilience Forum, state agencies, and other interviewees during the inventory phase. These recommendations informed the plan list only. Once the plans were collected and inventoried, we began with a short calibration round where we each reviewed a set of plans, compared results, and refined the

codebook before proceeding. Next, research team members reviewed and coded each plan based on information explicitly written in each document. Importantly, reviewers did not conduct interviews or surveys with jurisdictions to assess or determine intent. Instead, research team members relied entirely on what could be observed in or deduced from the plans themselves.

The plan coding process focused on the following major themes: collaboration, community engagement, equity, hazard coverage, implementation practices, and cross-plan integration. By using this approach, the team sought to create a consistent basis for comparison across different plan types. To ensure consistency, the reviewers used open-ended "narrative fields" for each assessment category to capture best practices, note abnormalities, or summarize what each plan documented. The team first analyzed these fields individually and then conducted a comparison across all plans to identify statewide trends, common strengths, and recurring gaps. This approach allowed the team to provide a comparative assessment regardless of differences in plan authorship, jurisdiction size, or plan purpose.

The PRO Research Team used the online survey vendor Qualtrics as our plan coding platform. We supplemented this with a structured coding sheet aligned to the project's major themes: collaboration, community engagement, equity, hazard coverage, categories of actions or strategies, implementation practices, and cross-plan integration. During the coding process, reviewers input standard plan metadata (title, jurisdiction, region, plan type and scope, authorship/consultant involvement, and adoption status/date), as well as detailed qualitative and quantitative information across the major themes. For example, collaboration was examined by documenting partners and roles included in the planning process. To understand community engagement, reviewers examined the outreach processes documented in each plan. For example, we noted engagement accessibility features or if community members contributed to the development of action items or strategies. Because equity is a critical component of resilience and hazard planning, the team specifically noted how each plan discussed vulnerable groups and if equity focused metrics and budget set asides were included.

Action items, strategies, and recommendations allow plans to be put into action. To better understand hazard reduction and resilience work across the state, the Research Team created a set of action types to aid in categorizing actions. The team used FEMA guidance and practitioner knowledge and expertise to develop the action typology. To better understand each plan's action implementation process, the reviewers examined responsible agencies or groups, timelines, budgets, and dependencies. To conclude the review process reviewers assessed how the plan incorporated, referenced, or integrated other plans.

Plan Typologies

The PRO Research Team reviewed 110 plans. We included plans across all five of the PRO Regional Resilience Forum regions. The plans reflect a diverse mix of plan types including Federal Emergency Management Agency (FEMA) compliant Natural Hazard Mitigation Plans (NHMPs), Community Wildfire Protection Plans (CWPPs), climate-focused plan (e.g., local climate adaptation plans), long-term recovery plans/strategies, regional Comprehensive Economic Development Strategies (CEDS), and a small number of "other" plan types. Table 1 shows the distribution of plans by type and PRO Regional Resilience Forum region.

Notably, the distribution of plans varies by PRO Regional Resilience Forum region. This reflects differences in the number of counties per region—Eastern (7 counties), Central (11), Southern (5), Northwest (10), and Metro (3)—as well as differences in hazard exposure profiles, population size, and levels of urbanization. In the Northwest region, for example, the largest number of plan entries (50) comes from a group of ten counties that includes several of the most populous jurisdictions in the state. Conversely,

Eastern Oregon's seven counties tend to be geographically large but more sparsely populated; the region's 23 entries therefore reflect fewer counties overall but a broader mix of plan types. The Metro region, composed of only three high-population counties with dense infrastructure, contributes 24 entries that tilt toward climate, hazard mitigation, and complex multi-jurisdictional plans.

This assessment includes review of all 36 county-level NHMPs. Importantly, Multi-jurisdictional Natural Hazard Mitigation Plans (MJNHMP) reviews focused exclusively on the county-level components, not on other jurisdictions participating in the multi-jurisdictional plan. In certain cases, the team conducted an independent review of individual jurisdictions included in a MJNHMP. These are counted as separate plans for the sake of this analysis.

Table 1 Plan Type by State Resilience Forum Region

Plan Type	Eastern	Central	Southern	Northwest	Metro
CEDS	1	0	0	0	0
CWPP	2	12	3	9	3
Climate Change	5	7	5	10	6
Energy Resilience Plan	2	2	2	2	2
Long Term Recovery Plan	1	1	2	1	1
NHMP	8	12	8	21	8
Other:	4	4	6	7	4
Total	23	38	26	50	24

Source: Local Plan Content Analysis (2026)
Note: sums by region can exceed the total per plan type because some plans span multiple regions.

State Plans that Support Local Plans

Oregon has an unusually strong foundation of hazard science and planning guidance produced by the Department of Geology (DOGAMI), the Department of Land Conservation and Development (DLCD), Oregon Coastal Management Program (OCMP), and research partners such as the Oregon Climate Change Research Institute (OCCRI), and these resources are well-suited to inform local resilience decisions when they are intentionally connected to adopted local plans. However, these state-level plans and guidance documents are not included in this content review because they are not directly tied to implementation frameworks.

DOGAMI's Open-File Reports, for example, are designed for practitioner use and often pair hazard mapping with implementable risk-reduction concepts. The recent post-fire debris-flow report (OFR O-25-09) not only evaluates hazard and exposure across multiple major fire areas, but also lays out "roadmaps to risk reduction" that span public awareness, emergency preparedness, planning/regulation, and physical mitigation, elements that align directly with the types of actions communities typically prioritize in Natural Hazard Mitigation Plans (NHMPs) and related implementation programs. Likewise, DOGAMI's tsunami evacuation work (e.g., OFR O-24-08) evaluates pedestrian evacuation routes and identifies route vulnerabilities and improvements, which are the kinds of actionable findings that can inform both mitigation action lists and on-the-ground preparedness investments.

DLCD's guidance documents are particularly valuable because they help translate hazard information into adoptable land-use tools, such as comprehensive plan policies and development code provisions. The Tsunami Land Use Guide provides model language that communities can tailor to reduce risk through siting, development standards, and long-term community form, tools that complement (but are distinct from) the project and program list typically found in NHMPs. DLCD's Landslide Land Use Guide similarly provides examples intended to help communities incorporate DOGAMI lidar-based landslide mapping into local plans and codes, supporting more consistent risk reduction over time. For climate change, OCCRI's county-level future projections were created specifically to support DLCD's NHMP process, noting that Oregon governments are required under 44 CFR 201 to maintain FEMA-approved NHMPs and that these plans increasingly benefit from forward-looking climate signal information for hazards such as wildfire, drought, extreme heat, heavy precipitation, landslides, and flooding.

Despite this strong resource base, incorporation into adopted plans used by local decision makers remains uneven. In practice, state reports and datasets are sometimes included as background in NHMPs or referenced in planning narratives, but their recommendations do not consistently "travel" into the adopted mitigation action lists, CWPP priority actions, capital improvement programming, or code amendments that drive implementation. This challenge is reinforced when tools are explicitly framed as non-regulatory unless locally adopted, for example, Oregon's sea level rise planning resources note that planning layers are not regulatory unless a jurisdiction adopts them, meaning the benefits depend on a deliberate local adoption pathway and follow-through.

Local Hazards and Resilience Plan Goals and Actions

Goals

Across the plans reviewed, about one-fifth explicitly identify vulnerable populations in their goals and objectives. These plans go beyond general references to vulnerability and directly state that certain populations should be prioritized or considered within their hazard-mitigation or resilience goals.

The data show a wide range of population groups named, though the level of specificity varies substantially. Several plans offer precise lists of groups, while others use broader or non-specific references such as "vulnerable communities" or "underserved populations."

Among the plans that do name specific populations, the most frequently identified groups include:

- People with disabilities or medically dependent individuals
- Seniors and older adults
- Black, Indigenous, and People of Color (BIPOC), Tribal, and other communities of color
- Children and youth
- Low-income households

Less frequently, but still notably, some plans identify non-English speakers/ Limited English Proficiency (LEP) populations, outdoor and agricultural workers, rural residents, pregnant people, and unhoused or housing-insecure households.

However, nearly half of the plans include only generic or unspecified references, for example, describing "vulnerable communities," "underserved populations," or "those least able to prepare, respond, and

recover," without naming particular demographic groups. This pattern shows variation in the level of specificity to which plans discuss equity or vulnerability as well as the extent to which they include actionable specificity about which populations their goals are intended to serve.

Taken together, the snapshot shows a planning landscape in which recognition of vulnerable populations is common. However, specificity varies with the most frequently named groups corresponding to commonly used dimensions of social vulnerability identified in the literature: disability, age, race/ethnicity, childhood, and economic status.

Action Item Assessment

The research team identified and coded 4,289 individual actions across the plans reviewed for this assessment. Of those, 906 actions could be counted in more that one action category. This resulted in a total of 5,195 actions included across identified action categories.

Across the reviewed plans, action structures vary substantially by plan type, influencing how ready each plan is for implementation. Natural Hazard Mitigation Plans (NHMPs) and Community Wildfire Protection Plans (CWPPs) contain the largest action inventories (averaging ~41 actions, n=82). NHMPs demonstrate significantly stronger implementation readiness: roughly three-quarters prioritize actions, more than 90% identify an action lead or owner, and many include budget or funding information. By contrast, CWPPs, despite having similarly large action lists, rarely prioritize actions, less consistently assign ownership, and are far more likely to lack budget details, making tracking and implementation more difficult.

Climate Change Plans contain the highest number of actions (~49, n=13), but are least likely to assign priorities or timelines. They are, however, substantially more likely to include measures of success, with about one-third of plans incorporating indicators. Their actions more frequently address community-centered and systems-oriented strategies rather than traditional infrastructure-only mitigation.

Plans in the "Other" category, (~33 actions on average), tend to have narrower scopes but relatively strong identification of leads and owners. Budget documentation and indicators remain limited. The Rogue Reimagined Long-Term Recovery Plan includes consistently prioritized and clearly assigned actions, reflecting the structured nature, and deep community engagement, of post-disaster recovery.

Across all plan types, a consistent statewide gap emerges: measures of success (indicators) are rarely documented, especially in NHMPs and CWPPs. Many plans identify what needs to be done and who is responsible but not how success will be evaluated. Climate plans include indicators more frequently than other plan types but tend to lack the prioritization, timelines, and funding specificity needed for implementation.

Action Category Framework

To support comparability across plan types, the reserch team assigned actions to a set of standardized categories. Because resilience actions often span multiple domains, an action could be coded into more than one category. Categories included:

Planning, Governance, and Collaboration

- Local Plans / Regulations – Actions that update or create policies, codes,or plans (e.g., zoning, comprehensiveplan, hazard overlays).

- Collaboration – Actions that formalize partnerships (e.g., MOUs, joint exercises, shared data agreements with agencies, regions, Tribal governments, etc.).
- Staffing Capacity – Actions that add or fund staff positions or technical assistance for resilience implementation.

Infrastructure and Lifeline Systems

- Water / Wastewater – Actions that protect or upgrade water supply andwastewater systems, includingdams/levees, treatment plants, pipelines, pumps, and stormwater facilities to reduce hazard impacts.
- Energy Systems – Actions that strengthen or modernize systems for electricity and fuel, including powerplants, substations, transmission lines, pipelines, and storage to ensurereliability during disasters.
- Communications – Actions that improve emergency communication systems and networks, such as alert platforms, interoperable radios, sirens, and broadband resilience.
- Transportation Infrastructure – Actions that protect or create roads, highways, bridges, culverts, etc. from hazard impacts or to enhance evacuation.
- Critical / Essential Facilities – Actions that protect critical and essential facilities required for public safety, emergency response, and community function.

Natural, Cultural, and Community-Centered Strategies

- Natural Systems Protection – Actions that restore or protect ecosystems to reduce risk (e.g.,wetlands, riparian buffers, fuel treatments).
- Cultural Heritage Resources – Actions that protect cultural or historic sites and artifacts from hazard impacts.
- Education and Awareness – Actions that inform and train the public or officals about hazards and resilience strategies.
- People-Centered Actions – Actions that support community well-being (e.g. health services, resilience hubs, social programs).
- Housing Security – Actions that protect or improve housing resilience(e.g., home hardening, buyouts,relocation assistance).
- Workforce Resilience – Actions that build skills and capacity for future needs (e.g., training, apprenticeships, responder readiness).
- Access to Capital – Actions that increase funding availability (e.g.,grants, revolving funds, microgrants for CBOs).

These categories provide a consistent framework for understanding where jurisdictions are investing, where gaps persist, and how broadly resilience strategies address lifeline systems, community needs, governance capacity, and environmental protection.

Action types and patterns

Across the reviewed plans several dominant action themes emerge. The strongest trends center on regulatory updates, public information campaigns, and natural systems management.

Figure 2 shows that the single largest category of actions statewide involves Local Plans and Regulations, which account for 15% (650) proposed actions. These include zoning or code updates, hazard overlays,

comprehensive plan amendments, and explicit plan-integration steps that embed hazard mitigation across planning systems.

The second major area of emphasis relates to Natural Systems Protection, accounting for 14% (594) of actions statewide. Actions in this area include vegetation management, riparian restoration, floodplain reconnection, and fuel reduction strategies. The presence of these types of actions in local hazard and resilience plans implies an understanding among local jurisdictions that ecological health can be a foundational component of local and regional resilience strategy.

A similarly prominent share of actions, 13% (563 identified statewide), focuses on Education and Awareness. These actions seek to improve hazard literacy among residents, institutions, and decisionmakers, and represent an important starting point for jurisdictions that may not yet have the resources or political backing to implement capital projects.

The next tier of action item focus for Oregon communities includes a significant number of actions focused on people-centered programming (9%, 393), critical and essential facilities (7%, 317), communications systems (7%, 311), transportation resilience (7%, 302), and collaboration (7%, 306). The frequency of actions in these categories suggest a broadly shared understanding that resilience involves infrastructure upgrades, strengthened partnerships, and activities that support community well-being.

Notably, several action categories appear far less frequently. For example, only 5% (211) actions relate to Access to Capital, despite funding barriers being one of the most frequently cited constraints in plan narratives. Similarly, Staffing and Workforce oriented actions appear just 2% (106) and 3% (131) of the time respectively. Housing Security actions appear only 2% (91) times statewide, even though housing instability is a key vulnerability and indicator of resilience. Finally, Cultural Heritage Resources protections are nearly absent in the plans we reviewed, with just 22 actions identified out of more than 4,200 reviewed (less than 1%).

The "other" actions encompass a wide range of supporting strategies that reinforce overall resilience by addressing analytical, operational, social, and policy needs. They include risk and vulnerability assessments that identify who and what is most at risk and form the analytical basis for targeted mitigation, along with mapping, data, and GIS efforts that convert hazard information into visual decision-support tools. Some actions enable implementation (such as funding programs and incentives that help households, businesses, and agencies afford mitigation) while others emphasize operational readiness and long-term recovery through debris management and strategic land acquisition to remove development from high-risk areas or preserve natural buffers. Social and community-focused actions, including food security initiatives and mutual aid or community support networks, help maintain essential resources and strengthen shared response capacity during disruptions. Additional actions such as research and studies expand understanding of hazards and mitigation options, while advocacy supports policy change and funding access. Finally, specialized High Hazard Potential Dam (HHPD) related actions address the unique risks for communities downstream of these structures. In general, the HHPD actions we observed emphasize enhanced monitoring, preparedness (e.g., evacuation planning), and interagency coordination.

Qualitative review of the research team's notes reinforce the quantitative findings presented above: jurisdictions consistently cite insufficient staff, unclear or nonexistent funding strategies, and limited technical capacity as reasons for proposing fewer implementation-oriented or capital-intensive actions.

For example, many action sheets identify actions without specifying the staffing resources, metrics, budget, or timeline needed to implement it.

Figure 2 Actions by Category and by Plan Type
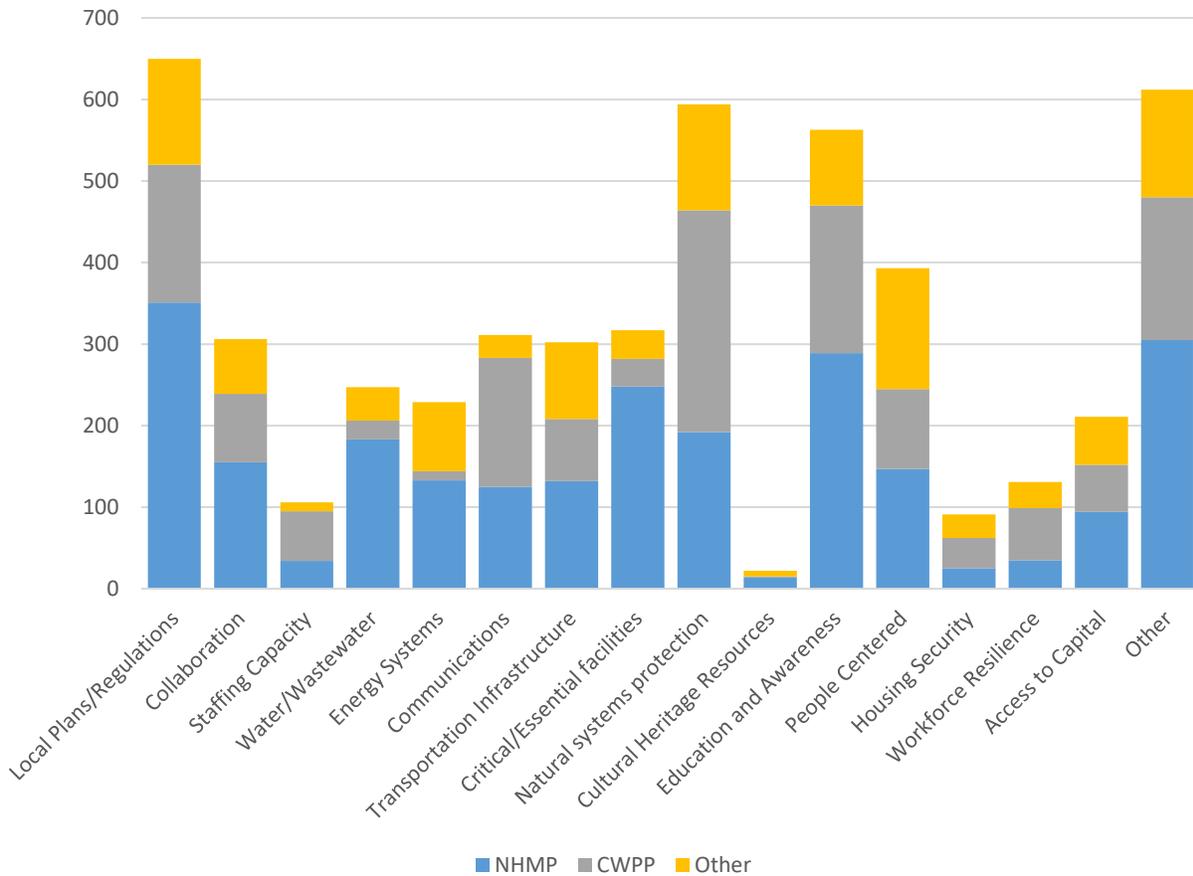
Source: Local Plan Content Analysis (2026)

Action Qualities

SMART actions (Specific, Measurable, Achievable, Relevant, and Time-bound) are the foundation of implementation-ready resilience planning. A SMART action clearly states what will be done, who is responsible, how progress will be measured, what resources are required, and when the work will occur. Plans that include SMART actions are far more likely to secure funding, coordinate partners, and track progress over time.

This analysis shows that while most communities list actions they want to take, comparatively few include all the SMART construct components. Using the SMART lens, action "ownership" is one of the strongest trends we observed across the dataset. Most plans (83%) specifically identify an organization or staff lead for at least one action. This demonstrates that many jurisdictions understand the importance of assigning roles and accountability.

Interestingly, other implementation process details vary. By way of example, 87% of plans identify a specific or general group to implement the plan, but only 32% of plans include a template to monitor action implementation. When present, the monitoring templates we observed typically take the form of

maintenance procedures, tracking forms, or readiness frameworks that outline how jurisdictions revisit, update, and manage their mitigation actions over time. As another example, around 58% of plans include time-bound actions (general – 36%, phased-17%, or detailed-5% timelines). However, many plans instead rely on vague phrases such as "ongoing," "as funding allows," or "future priority," which do not provide actionable sequencing or allow for progress evaluation.

For another example, just over half (55%) of the plans include any information about action item cost. Of those:

- 29% name a possible funding source
- 19% give a rough cost estimate
- 2% provide a detailed budget

Because most actions do not include detailed financial information, jurisdictions may not know whether they can realistically afford to do them, making it difficult to move from planning to implementation.

Indicators, the "Measurable" component of SMART, occur infrequently in the plans we reviewed. Only one of the plans we reviewed demonstrated meaningful inclusion of action-level indicators or measures of success. This is despite the documented importance of indicators for measuring progress, meeting grant reporting requirements, and demonstrating risk-reduction outcomes. Plans may reference community goals, but they generally stop short of determining how success will be measured.

Taken together, these findings indicate that while Oregon jurisdictions are taking meaningful steps toward defining resilience actions, many plans lack the SMART structure required for actionable, fundable, and trackable implementation. Expanding documentation on budgeting, timelines, and indicators may increase clarity about implementation processes and could improve the readiness and impact of future plan updates.

Engagement Methods

Community engagement can provide local knowledge and context for more effective resilience planning because it brings local knowledge, builds trust, and ensures that proposed actions reflect real needs and lived experiences. When residents, businesses, and organizations participate in shaping resilience strategies, plans become more accurate, more equitable, and more supported by the people who will ultimately rely on them. Engagement also strengthens relationships and communication networks that are critical during emergencies. In turn, this can help communities respond and recover more effectively.

As shown in Figure 3 a large majority of plans (82.8%) document at least one engagement method, with an average of 1.88 methods per plan. Community engagement is dominated by surveys (57.6%), followed by listening sessions (24.2%) and pop-up events (16.2%). Higher-touch, relationship-building approaches, such as participatory mapping (10.1%), youth engagement (4.0%), and lived-experience panels (4.0%), are used far less frequently. This shows that plans tend to use survey-based methods, with less frequent use of participatory approaches.

Responses in the "Other" category include informal, opportunistic, or media-based engagement, such as flyers, social media campaigns, public meetings, press releases, or website postings. In some cases, plans used film screenings, Google Forms for draft comments, public fairs, or air-quality pilot programs as touchpoints for community input. Other examples include tabling at local events, interactive tools like conversational text bots, and posting drafts online for public comments. These approaches tend to be

light-touch, designed to distribute information broadly or gather quick, low-barrier feedback. A few are more innovative (such as targeted text-based engagement or preference polling) but most serve to supplement, rather than replace, deeper engagement methods.

Figure 3 Engagement Activity by Plan Type
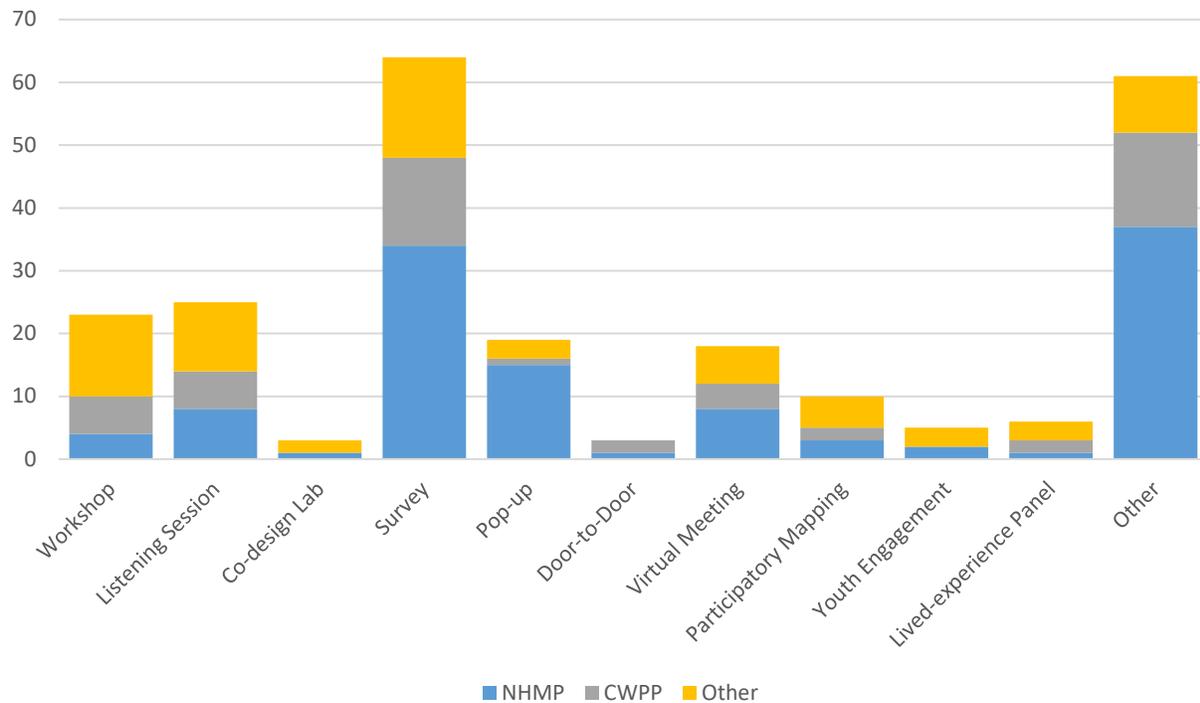
Source: Local Plan Content Analysis (2026)

Substance of Community Input

Plans most often gather feedback on risks and concerns (53.5%) and community priorities (46.5%). Far fewer solicit input on solutions (29.3%) or barriers to implementation (16.2%), indicating that engagement frequently stops short of co-developing actionable strategies with communities.

Language Access and Accessibility

Language accessibility remains inconsistent. Spanish language engagement is explicitly identified in just 16.2% of plans, suggesting that engagement may not adequately reach Spanish-speaking residents despite their presence in many Oregon communities. Similarly, only 49.5% of plans document accessibility features. Translation or interpretation services appear in only 6.1% of plans, potentially limiting equitable participation.

Feedback Traceability and Accountability

Just under half of the plans reviewed (47.5%) show evidence of feedback traceability. In other words, these plans do not show how public input influenced plan content. Only 19.2% include a "What We Heard / What We Changed" section. Very few (6.1%) provide action mapping approaches while only 2.0% explain why suggestions were or were not adopted. Taken together, the lack of feedback traceability and accountability have the potential to undermine transparency and weaken institutional accountability during implementation.

Practical takeaway for agencies and CBO partners

Overall, Oregon's plan inventory has a strong baseline of survey-led engagement, but findings suggest that expanding the range of engagement methods could influence inclusivity by: (1) expanding engagement beyond surveys toward participatory approaches (mapping, youth, lived-experience panels), (2) documenting language access and accessibility features consistently, and (3) institutionalizing traceability practices so plans clearly show how community input shaped priorities and actions.

Equity

The plans we reviewed vary in how they address equity. The PRO Research Team observed significant variation in how vulnerable communities are identified across plans or whether equity is supported through metrics, funding, or governance structures. Notably, Climate-focused and specialized plans demonstrate the strongest and most consistent integration of equity, while Natural Hazard Mitigation Plans (NHMPs) and Community Wildfire Protection Plans (CWPPs) show minimal incorporation.

NHMPs typically reference vulnerability only in broad terms. Few identify specific populations facing disproportionate risk (only 30% name vulnerable groups in their goals and about one-third do so in actions). When groups are named, references most commonly include older adults, people with disabilities, youth, and low-income households. Most NHMPs fall into the lowest tiers of equity scoring, and none include equity metrics or equity-related budget commitments. Equity-focused governance structures are also rare, appearing in just 6.8% of plans.

CWPPs include even fewer explicit references to equity. Only 11% identify vulnerable groups in goals with twice that number (22%) referencing vulnerable groups in actions. In CWPPs, equity content tends to be brief, generic, or overshadowed by technical wildfire-focused priorities. No CWPPs include equity governance structures; equity metrics or budget set-asides are nearly absent across the category.

By contrast, climate plans tend to include a higher proportion of equity-related content. Over one-third identify vulnerable groups in their goals, and nearly two-thirds name them in actions. These plans more explicitly address the needs of BIPOC communities, non-English speakers, disabled residents, older adults, low-income households, farmworkers, and tribal communities. They are also far more likely to include equity metrics (46%) and governance models such as CBO partnership networks or advisory committees, resulting in substantially higher equity scores overall.

Other specialized plans (including Energy Resilience and Long-Term Recovery Plans) also integrate equity more meaningfully. For example, they often identify vulnerable populations specifically in their actions and tend to use more equity metrics or governance elements in their implementation sections. Notably, half of long-term recovery plans include equity-oriented budget commitments, reflecting the realities of post-disaster allocation.

Plans grouped under "Other" show mixed performance: some meaningfully identify vulnerable groups (e.g., City of Ashland Community Response Plan), while many provide little or no equity content.

Overall, a clear gradient emerges. Climate, energy, and recovery plans more consistently operationalize equity (naming vulnerable groups, incorporating metrics, and establishing governance structures) while NHMPs and CWPPs NHMPs and CWPPs include comparatively fewer equity-related elements. This gap underscores a significant opportunity to strengthen Oregon's core hazard planning systems by adopting the more robust equity practices already present in other resilience planning domains.

Implementation Accountability

Collaboration is consistently linked to stronger, more explicit, and more actionable implementation structures in hazard mitigation and resilience planning. NHMPs and CWPPs consistently involve the widest range of collaborators (typically five to six partner types per plan) because they are governed by federal regulation, specifically 44 CFR Part 201, which requires that hazard mitigation plans be developed through a "coordinated process" that draws on a wide range of partners and resources. This federally mandated coordination helps ensure that implementation responsibilities can be assigned, monitored, and maintained across agencies.

In contrast, Climate Action and Climate Change Plans involve fewer and less consistent partners, which often leads to weaker accountability structures because fewer entities are formally tied to implementation roles.

Across all plan types, the partners most consistently involved (state agencies, counties, federal agencies, cities, and fire districts) form the backbone for carrying out mitigation actions.

Most plans use Steering Committees, present in over 80% of reviewed plans, as the central governance structure for tracking implementation progress. Yet shared-governance roles (e.g., Co-Authors or Community Co-Leads) appear less frequently than advisory roles, signaling that while consultation is common, co-decision-making, which strengthens implementation accountability, is still limited.

Figure 4 shows the collaboration "score" by plan type. Collaboration levels vary: NHMPs and CWPPs most often show "Limited" to "Increased" collaboration, whereas some climate and specialized plans demonstrate "Significant" collaboration because they incorporate more robust engagement with a variety of governments and community based organizations, and sometimes include community-driven processes. Plans with broader, more inclusive collaboration tend to document clearer action ownership, have stronger oversight groups, and maintain higher accountability for implementation over time. These differences highlight an opportunity to expand community partnerships and shared leadership models to strengthen Oregon's resilience implementation system.

Figure 4 Collaboration "Score" by Plan Type
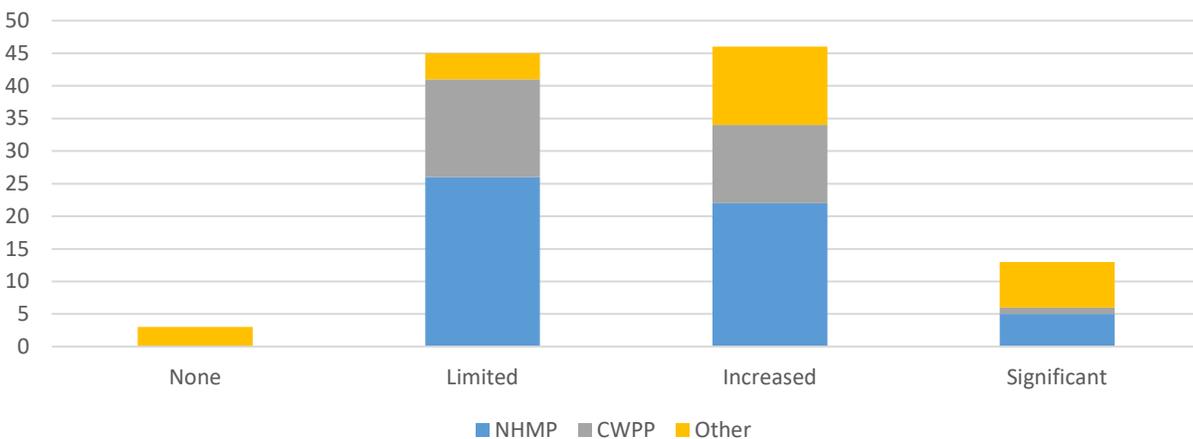
Source: Local Plan Content Analysis (2026)

Key Findings

This review of resilience-related plans across Oregon shows that communities are actively planning for a wide range of natural hazards. However, the quality, depth, and implementation readiness of these plans vary significantly. While most plans include a wide range of goals and actions, few include elements such as timelines, budget details, or indicators needed to turn those ideas into funded, implementable projects. Across the state, the strongest and most common actions focus on updating local plans and regulations, restoring natural systems, and expanding public education. However, key gaps persist in areas such as budgeting, equity, staffing, and long-term accountability.

Overall, the analysis highlights four major themes:

1. Oregon's hazard planning landscape is broad but lacks integration
Local jurisdictions produce many types of resilience-related plans. But the level of detail, community engagement, and integration across sectors varies widely. NHMPs and CWPPs tend to have the most structured content and largest action inventories, while climate and specialized plans offer stronger people-centered and equity-focused strategies.

2. Communities share common resilience priorities.
Across plans, the most frequently observed actions involve updating codes and local plans, protecting natural systems, conducting public education, and improving infrastructure (e.g., communications, critical facilities, and transportation). These repeated themes indicate commonly recurring action areas where resilience investments are most needed.

3. Implementation readiness is limited across most plans.
Few plans include SMART elements—clear timelines, budgets, or measurable outcomes. While most identify who is responsible for actions, only about half include any cost information, and almost none define indicators to measure success. This lack of implementation detail makes it difficult to track progress or advance actions toward funding.

4. Engagement Methods Vary Across Plans.
Climate-focused and recovery plans integrate equity most consistently. Conversely, NHMPs and CWPPs tend to include minimal detail on vulnerable populations or equity metrics. Engagement across plans relies heavily on surveys, with limited use of deeper, community-driven methods or accessible language services. Few plans document how public input influenced final decisions.

Taken together, these findings indicate variation across the state in expectations and minimum standards for resilience planning. This variation is most pronounced in the areas of plan implementation, equity, and accountability. Addressing these components may influence how Oregon coordinates resources, supports local capacity, and achieves consistency in resilience-related activities across regions.