



### **Public Safety Alert**

TEST - Multnomah County is testing its Wireless Emergency Alert system. This message confirms that your phone can receive emergency alerts. In an actual emergency, this system would be used to share potentially life-saving information. NO ACTION is required. Visit <https://arcg.is/0mDLjG> to complete a survey regarding this TEST. END OF TEST

# Initial Findings from Multnomah County's Test of the Wireless Emergency Alert System

August 2025

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**Acronyms**

- FAQ      Frequently Asked Questions
- FCC      Federal Communications Commission
- IPAWS    Integrated Public Alert and Warning System
- MVNO    Mobile Virtual Network Operator
- SWIC    Statewide Interoperability Coordinator
- WEA      Wireless Emergency Alert

## Summary

This report details Multnomah County's<sup>1</sup> experience conducting its first live Wireless Emergency Alert (WEA) test on August 14, 2025. Given the county's diverse geography, encompassing both urban and rural areas within the larger Portland-Vancouver metropolitan region, this test provided a crucial opportunity to assess the end-to-end delivery of public-facing alert infrastructure, including potential overspray into neighboring counties. The county, with a population exceeding 800,000, estimated a live WEA test could potentially reach one million people. This test was particularly significant as only eight WEAs had been sent in the county since September 2020, with mixed results and feedback, and a live test had never been conducted before.

The planning for this live WEA test was comprehensive, involving extensive coordination with regional emergency managers, state agencies, and commercial mobile service providers. Multnomah County developed a detailed public information and education plan, including messaging in English and Spanish, a dedicated Frequently Asked Questions page, and a survey for alert recipients. This plan incorporated guidance from the Federal Communications Commission (FCC) regarding public notification of the test, and a multi-channel communication strategy using social media, press releases, and direct outreach to various community organizations. A "dry run" practice test was also conducted to ensure system readiness. Despite efforts to coordinate with the Oregon Statewide Interoperability Coordinator for data on actual WEA reach and overspray, this information was not provided by wireless carriers, a limitation in the final assessment.

The assessment of the WEA test relied on two surveys: one for recipients and one for non-recipients, designed to gather basic information on alert reception and potential barriers. The recipient survey, intentionally simple for maximum participation, was translated into ten languages and garnered nearly 8,000 responses. The non-recipient survey, prompted by immediate feedback, was more detailed and sought to understand why some individuals within the county did not receive the alert. This survey was not translated due to time constraints and aimed to quickly collect data on location, device technology, and settings. Additional feedback was collected through individual emails and informal interviews with key informants in areas suspected of low reception.

The post-test survey results were largely promising, indicating high localization of the alert, with approximately 91% of respondents in Multnomah county, suggesting minimal overspray. The alert effectively reached users across diverse operating systems (predominantly iOS and Android) and various cellular carriers, including major providers and numerous mobile virtual network operators (MVNO), indicating these factors were not significant barriers. Over 84% of respondents reported themselves as county

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<sup>1</sup> In this summary and the main report, when "county" is capitalized, it refers to the County government. When it is not capitalized, it refers to the geopolitical boundaries of the county.

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residents, validating the test's success in reaching its intended demographic. However, the survey for non-recipients highlighted areas for improvement, with 20% of respondents unaware or unsure of WEAs and a significant portion uncertain about their device's alert settings, suggesting that non-receipt was more likely due to individual device configurations than transmission issues, especially in urban areas.

Based on these findings, Multnomah County has identified several key recommendations. These include enhancing public education on various emergency alert systems (WEA, PublicAlerts, Nixle) to address confusion and improve awareness, promoting registration for opt-in systems like PublicAlerts, and providing clear guidance on managing device alert settings. The report also recommends regular testing of both PublicAlerts and WEA systems, standardizing alert terminology across mobile devices, and improving data collection and analysis through partnerships with wireless providers. Future research should focus on obtaining wireless provider data for definitive overspray assessment, in-depth analysis of non-recipient data, and targeted studies in geographically challenging areas to further optimize alert effectiveness and public understanding.

## Key findings and recommendations

- **Geographic targeting success:** The alert successfully reached its intended audience in Multnomah county, with 91% of recipients reporting they were within the county. This indicates effective localization and minimal "overspray" into adjacent areas.
- **Diverse device and carrier reach:** The alert was received across a wide range of operating systems (iOS and Android) and cellular carriers (T-Mobile, Verizon, AT&T, and MVNOs), demonstrating broad compatibility and reach.
- **High resident engagement:** A significant majority (over 84%) of alert recipients were Multnomah county residents, validating the system's ability to reach its primary demographic.
- **Primary reasons for non-receipt—device settings:** A majority of non-recipients (70%) were in or near the City of Portland, suggesting that non-receipt in urban areas is more likely due to device settings than transmission issues. Individual device notification settings, such as opting out of certain alert types or having "Do Not Disturb" active without override settings seem to be key. Operating system, device make/model, and cellular carrier were not significant factors in non-receipt.
- **Lack of user familiarity with settings:** A high percentage of non-recipients were unsure about their alert and notification settings, indicating a general lack of user familiarity with alert and notification configuration options.
- **Awareness of WEAs:** While 80% of respondents were aware of WEAs, 20% were unaware or unsure, highlighting a gap in public education.

## Implications for using WEA during emergencies

- **Reliable geographic targeting:** The WEA system can be effectively relied upon to target specific geographic areas during emergencies, minimizing unnecessary alerts in surrounding regions.
- **Broad reach across devices and carriers:** Emergency alerts delivered via WEA are likely to reach a diverse user base, regardless of their device's operating system or cellular carrier. This ensures wide dissemination of critical information.
- **Effective for reaching local residents:** The system is highly effective at reaching the intended local population, which is crucial for localized emergencies requiring immediate action or information for residents.
- **Consider rural area challenges:** While urban areas showed non-receipt mainly due to device settings, continue to anticipate and plan for potential challenges in rural areas due to suboptimal cell tower coverage, even if survey responses from these areas were limited.

## Recommendations

- **Enhance public education on emergency alert and warning systems:** Continue and expand public education campaigns to raise awareness about WEAs in general. It should be part of a continuous public information and education campaign on the multiple ways we will communicate emergency alerts and warnings. This includes leveraging PublicAlerts (opt-in notifications), traditional media (television, radio, internet, and print), social media, and community outreach.
- **Promote PublicAlerts and Nixle registration:** While Multnomah County promotes PublicAlerts (opt-in, address-specific), feedback show confusion with WEAs (geographically targeted, no registration). The County also has Nixle, an anonymous opt-in system (ZIP code or hashtag-based) with over 76,000 users, not yet promoted. Nixle offers an additional way to disseminate general public safety information. A multi-modal approach is crucial, and increased PublicAlerts registration enhances direct information delivery, especially for life-safety actions.
- **Enhance public education on device alert and notification settings:** Many non-recipients were unsure of device settings. Continuous public education is needed to guide individuals on managing alert settings, including how to enable emergency alerts that override "Do Not Disturb" or "Focus" modes. Materials should be multilingual and accessible.
- **Regularly test PublicAlerts and WEA systems:** The region is working on regular WEA live testing, and the Emergency Alert System is already tested regionally. We recommend additional regular tests of the PublicAlerts system as part of ongoing public education.

## Summary

- **Standardize alert and notification terminology:** We recommend the FCC and the Federal Emergency Management Agency's Integrated Public Alert and Warning System group work with mobile phone manufacturers to standardize alert and notification terminology across devices to reduce user confusion.
- **Improve data collection and analysis:** We recommend the Oregon Statewide Interoperability Coordinator pursue partnerships with commercial mobile service providers for device and network monitoring data from future tests or events. This data is vital for assessing WEA reach and refining targeting.
- **Refine survey instruments:** Future WEA surveys should incorporate lessons from this test. Recipient surveys need to ask about prior WEA awareness. All surveys should streamline questions about device settings and preferences. Demographic questions should be considered for assessing outreach to underserved communities. Geotagging, with privacy safeguards, should also be considered for precise location data. Non-recipient surveys should include inquiries about airplane mode and cellular data.



*MCEM Alert Originator sending the WEA alert to all of Multnomah county using Everbridge.*

*Photo credit: FEMA IPAWS TSSF*

## Planning

### Background

Multnomah county, with a total population of over 800,000 people, and home to the City of Portland, presents some unique challenges when conducting a live WEA test. It is narrow and long in shape, encompassing both urban cities and rural, remote, unincorporated communities. It is part of the Portland-Vancouver metropolitan area, which spans two states and five counties, and has a total population of about two million people.

While the county is intersected by two interstate routes—I-5 and I-84—and historically boasted a significant commuter population, there do not appear to be any recent, authoritative, publicly available studies or surveys of the number of people who currently transit through the county on an average weekday, or the daily number of visitors and commuters. Nevertheless, the County estimated that a live WEA test could potentially reach one million people in and passing through the county, also accounting for potential overspray into neighboring counties.

Since September 30, 2020, the earliest date for which records are available on PBS's Warning, Alert and Response Network as of this writing, only eight WEAs had been sent in Multnomah county<sup>2</sup>, with mixed results and feedback. We had never conducted a live test<sup>3</sup> of the system. In fact, in the same time period, only three other counties had conducted live tests: Josephine County in 2021, Lane County in 2022, and Lincoln County in 2024. WEAs are more frequently used in central and southern Oregon, primarily for wildfire evacuations and flooding.

In 2022, with the state's adoption of Everbridge as our platform for sending emergency alert and warning notifications, Multnomah County took over the administration of the platform locally, which previously had been maintained by the City of Portland's Bureau of Emergency Management. The City retained the credentials for sending notifications via WEA and the Emergency Alert System until they were set to expire in the spring of 2024.

Expertise in using the platform to send alerts to both through the opt-in community emergency notification system known locally as PublicAlerts and through the national Integrated Public Alert System (IPAWS) had waned in the wake of COVID and the loss of the County's duty officer program. In 2023, we began to re-build the County's capacity to

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<sup>2</sup> August 13, 2021 (one WEA on severe heat); September 8, 2022 (seven WEAs on a possible Public Safety Power Shutoff). The National Weather Service issued a Flash Flood Warning via WEA on January 13, 2021. Source: warn.pbs.org

<sup>3</sup> A "live test" is a test alert notification that intentionally uses a "live" event code, such as "Imminent Threat" and a jurisdiction's IPAWS "live" credentials for sending messages to the general public as opposed to using a "test" event code, such as "Required Weekly Test" or "test" credentials to send a notification in a test environment.

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send alert notifications in light of its responsibilities as the account administrator for Everbridge. We slowly rebuilt the County's duty officer program and conducted initial training on how to use the system to send opt-in notifications via PublicAlerts. Duty officers were also tasked with completing requisite online training for alert originators offered by IPAWS.

In 2024, when the City of Portland's IPAWS credentials expired, the new credentials were assigned to Multnomah County Emergency Management. This furthered the need for Multnomah County Emergency Management staff to be capable and competent in sending alerts. Duty officers were encouraged to participate in virtual training and exercises periodically offered by IPAWS throughout 2024.

At the same time, Multnomah County, with federal grant funding, undertook a project to develop a comprehensive alert and warning plan that would serve as a functional annex to its Comprehensive Emergency Operations Plan. The project also included the development of standard operating guidelines for alert notifications from the Emergency Operations Center and a field guide for alert operators to reference when sending IPAWS alerts using the Everbridge platform.

In December, 2024, when Multnomah County initially requested the IPAWS team at the Federal Emergency Management Agency for an in-person training workshop at its Emergency Operations Center in Portland, Oregon, for regional Alert Originators, we did not set out to test our Wireless Emergency Alert (WEA) system. In late May 2025, when IPAWS confirmed that it would be able to conduct the on-site workshop, it added the condition that we conduct a live test of the WEA system during the workshop as one of two annual live tests allowed by the Federal Communication Commission's (FCC) 2024 rule<sup>4</sup> permitting counties to send up to two live WEA tests per calendar year. To allow for time to adequately prepare for this test, the County selected a date in mid-August that corresponded with the availability of the IPAWS team.

## **Timeline**

With this new requirement, Multnomah County welcomed the opportunity to test its WEA capabilities and to understand the message delivery end to end of the public-facing alert infrastructure in Multnomah county, including overspray into neighboring counties. Until this test, there was only speculation both locally and at the state level on the reach of WEAs in this geographically complex environment.

Additionally, recent disasters in Hawaii, Los Angeles County, and Texas that drew attention to challenges and failures to successfully utilize IPAWS systems reinforced the

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<sup>4</sup> See Federal Communications Commission, 47 CFR Part 10, [PS Docket Nos. 15-94 and 15-91; FCC 23-88; FR ID 225472]. **Emergency Alert System; Wireless Emergency Alerts:**  
<https://www.federalregister.gov/d/2024-13194>

need for Multnomah County to conduct a test to ensure it is capable and prepared to send important alerts to affected community members.

The decision to conduct a live WEA test with IPAWS was immediately discussed among the Emergency Managers in the five-county Portland-Vancouver metropolitan region and Multnomah County informed the State of Oregon’s Statewide Interoperability Coordinator (SWIC), as well as the Everbridge Technical Account Manager. The equivalent positions in Washington State were notified through Clark County Regional Emergency Services Agency.

From the end of May, 2025, the Emergency Alert and Warning Working Group of the Regional Disaster Preparedness Organization, chaired by Clackamas County and vice chaired by Multnomah County, began drafting a regional communications strategy to comply with the requirements set by the FCC in their rule.<sup>5</sup>

The FCC requires the alerting authority to conduct outreach and notify the public before the test that live event codes will be used, but that no emergency is, in fact, occurring. It also requires that the message itself, to the extent possible, clearly state that the event is only a test. The alerting authority must coordinate the test among participating commercial mobile service providers, and with state and local emergency authorities, the relevant State Emergency Communications Committee (or Committees, in our case, as the test could affect multiple states), and first responder organizations, including 911 dispatch centers, police, and fire agencies. The final requirement from the FCC is that the alerting authority provide in widely accessible formats the notification to the public required that the test is only a test and not a warning about an actual emergency.

### **Public information and education plan**

By the end of June, 2025, Multnomah County had created a comprehensive public information and education plan<sup>6</sup>. (See [Appendix 1](#) for the outline.) This included the 90-character and 360-character WEA messages in English and Spanish, a Frequently Asked Questions (FAQ) page on its website (see [Appendix 2](#)), and a brief survey for alert recipients (see [Appendix 4](#))

The concept of operations for the public information and education plan began with comprehensive coordination among local, regional, tribal, and state public information officers, with Multnomah County’s Communications Office being the lead public information officer for this test. It included messaging guidance on using plain language, the creation of a social media kit for sharing, links to our FAQ and to Ready.gov, and

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<sup>5</sup> FCC Public Notice DA 24-675, **Public Safety and Homeland Security Bureau Announces Effective Date of New Wireless Emergency Alert Testing** Rules, released July 11, 2024.

<https://docs.fcc.gov/public/attachments/DA-24-675A1.pdf>

Additional guidance was issued in September 2024 by IPAWS as *Tip #28: Live WEA Testing*.

[https://www.fema.gov/sites/default/files/documents/fema\\_ncp\\_tip-28-live-wea-testing\\_042025.pdf](https://www.fema.gov/sites/default/files/documents/fema_ncp_tip-28-live-wea-testing_042025.pdf)

<sup>6</sup> For a PDF copy of the complete plan, please contact [emergency.management@multco.us](mailto:emergency.management@multco.us).

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standard text to include in public announcements. Where possible, public messages were also provided in Spanish.

Multnomah County maintains a social media presence on Facebook, Instagram, Bluesky, and X. In addition to those social media platforms, the Multnomah County Communications office shared two press releases with local traditional media, including print, television, and radio.

We also conducted a comprehensive direct communication campaign beginning one month prior to the test, with weekly emails including detailed guidance, posters, and three scheduled “office hours” for organizations with any questions. We also provided a number for 911 dispatch centers to refer any callers to. In addition to local and regional law enforcement, fire/emergency medical services, and 911 dispatch centers, school districts, hospitals, public transportation agencies, 211, 311, and culturally specific groups were included in these weekly communications. A complete list of recipient organizations is available in [Appendix 3](#).

The plan also included how we would collect feedback. We designed a very simple survey that we linked in the message. The survey was translated into ten languages used in Multnomah county. Additionally, following the survey, a separate survey was shared over social media to collect more information from people within Multnomah county who did not receive the test. (See [Appendix 5](#).)

The plan called for public messaging to begin one week prior to the test. The decision to start public messaging in earnest, including scheduling multiple interviews with our emergency management director, just one week prior was recommended by the Communications Office, who understood that we would be competing for the media’s attention with other potential stories and wanted to keep the topic fresh in the public’s mind closer to the actual date of the test. Messaging the media too soon could result in less coverage closer to the actual test and subsequently less attention paid by the public. The results of the coverage by media organizations, and our own communications on social media, are available in [Appendix 6](#).

The comprehensive planning around public information, including direct communication with myriad organizations, was successful. The 911 dispatch center for Multnomah County reported receiving just one phone call, from someone who did not receive the test. Additionally, 311 reported receiving just one call. Neither 211 nor any of the neighboring jurisdictions reported receiving any phone calls related to this alert.

### **Coordination with relevant State agencies and commercial mobile service providers**

In mid-June, in response to our notification to the SWIC that we would be conducting this test, we received an email conveying their requests and asking to be involved in the training and testing.

In addition to the FCC's requirements, the SWIC, which is currently housed in the Oregon Department of Emergency Management, wanted to know the purpose of the test and what the data collection method would be. The examples they listed included device based, network monitoring, or a combination. They asked for a website FAQ page, which we had already developed, and they also asked us to coordinate with cellular and broadcast media providers in the region.

Multnomah County followed up with a request to the SWIC, having direct relationships with the major commercial mobile service providers in Oregon, to request the providers share device-based and network monitoring data on our behalf. However, the SWIC clarified, based on personal experience, that such requests must be made to carriers at least six months in advance, though there does not seem to be any policy or rule related this. An employee from the Oregon Department of Emergency Management representing ESF2 - Communications<sup>7</sup> participated in the workshop. We have not received any data from the Oregon Department of Emergency Management or the mobile service providers to augment this report's findings.

### **Practice test with IPAWS**

IPAWS recommended that we conduct a "dry run" of the live WEA test at least two weeks prior to the actual live test to ensure that our template and settings were correct. Using the "Required Weekly Test" code, on May 28 at 11:29 a.m., Multnomah County sent the same test message. As a result of that test, which would have only been received by people whose cellular devices were opted in to receive test messages, 671 responses were received in the survey. Those survey responses were not included in the analysis in this report, but the overall responses were similar to those we received following the actual live test.

## **Assessment approach and limitations**

### **Survey design**

Multnomah County designed two surveys for this test: one for recipients and one for non-recipients of the test alert.

The original survey for recipients was intentionally kept simple. This was based on a review of similar surveys conducted by other jurisdictions nationwide. We wanted to ensure as many possible people would respond to the test and assumed that multiple questions, follow-on questions, and asking people to write in responses would all potentially be barriers to encouraging many responses. All questions were optional and

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<sup>7</sup> Emergency Support Function 2 – Communications is co-led by the Statewide Interoperability Program and the Public Utility Commission in Oregon. See <https://www.oregon.gov/eis/siec/pages/esf2.aspx> for more information.

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the survey was prefaced by a disclaimer that no personal information would be collected. Only one response per device could be submitted.

For the same reason, we did not use any geotagging capabilities nor did we ask people to provide their precise location. Although we used the ArcGIS Survey123 platform for this survey, the primary reason for that was its capacity to handle a high volume of traffic, up to 100,000 site visitors simultaneously, and to rapidly expand capacity to avoid crashing the site. No other platform that we could have used for this survey would have been able to handle a high volume of traffic without crashing.

Within these parameters, the survey for message recipients aimed to ask the most basic questions, mostly multiple choice, that would help inform how broadly or comprehensively the alert message was received and what possible technological barriers there might be.

The survey was translated into ten languages used by residents in Multnomah county, including Arabic, Chinese, Laotian, Japanese, Romanian, Somali, Spanish, Ukrainian, and Vietnamese.

The second survey, designed for non-recipients of the test alert, was not pre-planned. Rather, it resulted from a combination of a quick analysis of initial survey results and email responses that we received immediately following the test, as well as information we had learned from IPAWS during a workshop conducted for regional Alert Originators on the same day as the test.

This survey was designed with more detailed questions—11 total—that asked about specific geographic areas within Multnomah county people were when they did not receive the test; questions about their cellular device's technology, including make and model, operating system, and mobile service carrier; and questions about the user's device settings for alerts and notifications.

We wanted this survey to be available quickly and broadly immediately following the test, so there was not an opportunity to translate it into languages other than English. We were not expecting a high volume of simultaneous traffic, so we used Google Forms, instead, to design this survey.

Additionally, the primary means for disseminating the survey was via social media on August 15, the day after the test. The survey was also directly sent to individuals in parts of the county we had anticipated would have had lower reception due to suboptimal cell tower coverage, with the request that they share the survey as broadly as possible with their neighbors and communities.

### **Individual responses by email**

We initially asked people who did not receive the test alert, or who had questions, to email us. We received about 60 emails, mostly from people who did not receive the message and thought they should have. Some emails were from people who received the message

on at least one device and wanted to provide feedback on their experience. This information was incorporated in the [Initial Findings](#) section at the end of this report.

### **Informal interviews**

In addition to the two surveys and email communications we received, we made direct contact with key informants in geographical parts of the county where we suspected reception of the alert was low. Through phone calls and email exchanges, we received further feedback that we also incorporated into the [Initial Findings](#) section at the end of this report.

### **Limitations**

We have not received information or data from the Oregon SWIC or the mobile service carriers, including device-based and network monitoring data. Access to this data would have strengthened our initial findings, particularly regarding the actual reach of the WEA within the county and the extent of any overspray. Consequently, our initial findings and recommendations rely solely on the survey responses and direct anecdotal feedback that we collected after the test.

We were unable to conduct a rigorous statistical analysis of the survey responses nor organize any focus group discussions or key informant interviews. The survey responses could further refine our findings if subjected to a rigorous academic analysis including follow-up discussions and interviews.

Although we attempted to provide Spanish versions of our media releases, social media posts, and interviews, and we did communicate directly with leaders of multiple cultural communities, we could not consistently provide information in languages other than English. For instance, our FAQ and non-recipient survey were only available in English, while our survey for recipients was translated into ten languages.

Additionally, we received feedback from one person who self-identified as very low-vision in one eye and blind in the other, who did not receive the alert and subsequently completed the non-recipient survey. They remarked that the survey's default print size was small, but that they were able to zoom their screen to read the questions. Our website FAQ and both surveys were 508-compliant<sup>8</sup> and should be readable with most screen-readers.

In the recipient survey, we should have asked people who responded with "someplace else" to at least enter their ZIP code, if known, to help narrow our understanding of

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<sup>8</sup> 508 compliance refers to Section 508 of the Rehabilitation Act, which requires federal agencies to ensure their electronic and information technology is accessible to individuals with disabilities. Compliance involves adhering to technical standards that require features like text alternatives for images (alt text), closed captions and audio descriptions for multimedia, and accessible document structures, such as proper use of headings and styles. See <https://www.section508.gov/> for more information.

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potential overspray. Similarly, this question would have been suitable for the non-recipient survey.

We received feedback on some questions that should be considered if these surveys will be used again or by others. In the recipient survey, the last question asked whether the respondent was a resident of or visitor to Multnomah county. The third response option was originally “a resident of someplace else”, but initial feedback from some colleagues was that this was vague and recommended that it be changed to “neither a resident nor a visitor to Multnomah county”. However, this option was also confusing, as some people who self-reported as living in a neighboring county and working or just conducting personal business in Multnomah county during the test did not consider themselves to be “visitors”.

There are other ways to design this question and its responses that should be considered to minimize confusion and elicit the information the host jurisdiction is seeking. Nevertheless, the majority of responses we received were from people who reported being residents of the county, so, overall, it reinforced the primary information we were hoping to collect.

In the non-recipient survey, we asked respondents if they were familiar with WEAs prior to this test. We should have also included this question in the recipient survey.

## Results: Post-test Survey

Between August 14, 2:00 p.m. and August 18, 5:48 p.m., 7,906 responses were received. The survey was deliberately simple, asking just five basic questions, with all but one providing multiple-choice response options. We wanted to gather the most basic information while motivating as many people as possible to respond. Personal information, including geotagging data, was not collected and all questions were optional.

The survey was translated into ten languages: Arabic, Chinese, Laotian, Japanese, Romanian, Somali, Spanish, Ukrainian, and Vietnamese. To access the non-English versions of the survey, respondents needed to click on the globe at the top of the survey and select the language they preferred. We received five responses in Chinese and one in Russian.

### Summary

The post-test survey garnered significant participation and provided some promising results. The results strongly indicate that the alert was highly localized, with approximately 91% of respondents reporting they were in Multnomah county. This suggests a successful targeting of the intended geographical area, with minimal "overspray" into adjacent counties. While some responses from neighboring counties like Clackamas and Washington were recorded, the numbers were significantly lower, supporting the conclusion of limited alert dissemination beyond the borders of Multnomah county.

Further analysis of the location data reveals a notable number of self-reported "someplace else" responses within Oregon and Washington. This could be attributed to factors such as visitors or people passing through who did not know what county they were in, or individuals who work in Multnomah county but reside elsewhere and did not identify as visitors. The survey's design, which did not prompt for more specific location details from these respondents, limits a more granular understanding of their whereabouts.

However, the data strongly suggests that the vast majority of those who received the alert were indeed within Multnomah county, reinforcing the alert's effective geographic focus. Data from wireless providers is needed to definitively assess the actual overspray, but based on the current survey and anecdotal feedback, the overspray was less than anticipated.

Regarding the technical aspects of the alert reception, the survey provided insights into device operating systems and carriers. A significant majority of respondents, about 69%, reported using an iOS operating system, indicating a strong presence of Apple devices among those who received the alert. Android users constituted about 31%. While a small percentage reported "something else," the survey did not delve into the specifics of these

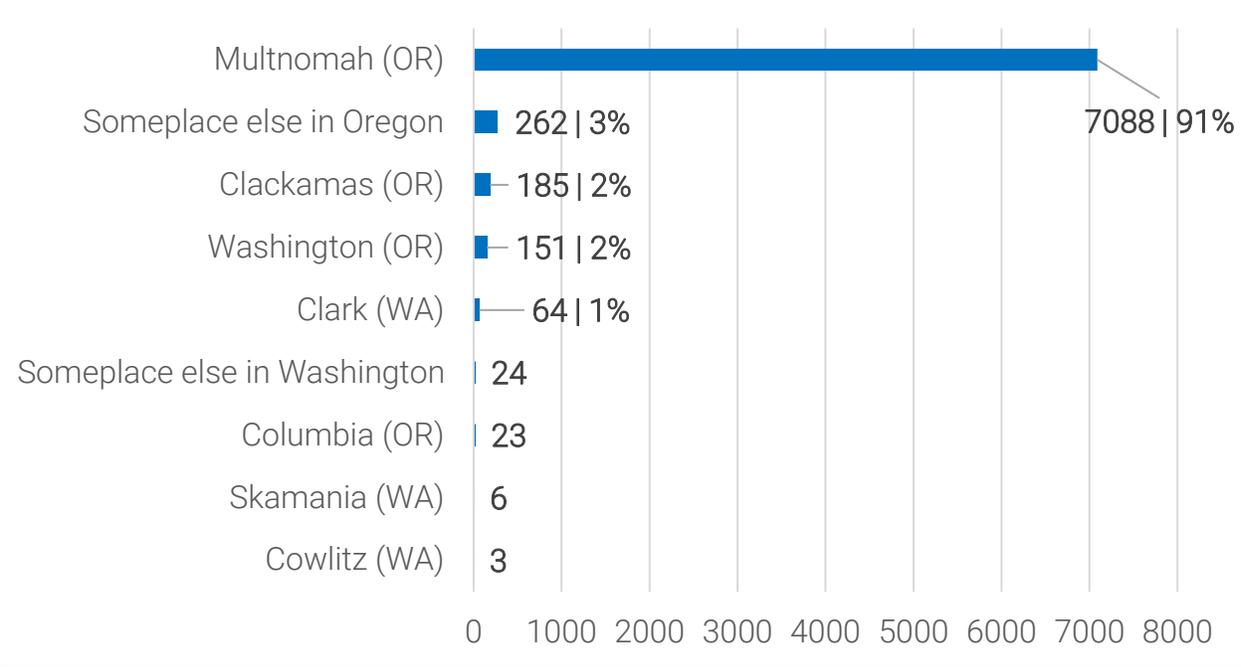
*Results: Post-test Survey*

other operating systems. This distribution of operating systems indicates that operating systems are not a significant factor in receiving notifications within the targeted area.

The diversity of cell phone carriers among respondents further illustrates the broad reach of the alert. T-Mobile and Verizon were almost equally represented as the primary wireless carriers, each accounting for about a quarter of the responses, followed closely by AT&T. Notably, a substantial portion of respondents (at least 22%) reported using "something else" as their wireless provider. A deeper dive into these "other" responses revealed that the majority were mobile virtual network operators (MVNO), indicating that the alert successfully reached users across a wide spectrum of service providers, including those operating on the major networks.

Finally, the survey results on residency status reinforce the success of the alert in reaching its target audience: Multnomah county residents. Over 84% of respondents identified as residents, with a smaller proportion (around 9%) reporting as visitors. The nearly 7% who reported being neither a resident nor a visitor could include commuters or those simply passing through. Regardless, the overwhelming majority of responses from Multnomah county residents strongly suggests that the test alert effectively reached its intended demographic, validating the alert system's ability to disseminate information to the local population with minimal unintended recipients.

**Question 1: Location at the time of the test**



*Table 1. Location at the time of the test*

There were 7,806 responses to this question; 100 people skipped this question. About 91% of survey respondents said they were in Multnomah county when they received the

notification. Among adjacent counties, the greatest number of people who reported receiving the notification was just 185 people in Clackamas county, followed by 151 people in Washington county. There were 64 people in Clark county and 23 people in Columbia county who reported receiving the alert.

In addition to the adjacent counties, 262 people self-reported that they were someplace else in Oregon and 24 people reported that they were someplace else in Washington. The survey did not ask people who responded with “someplace else” to identify where they were. It should be noted that nearly 700 survey respondents (see [Question 5](#)) self-reported as visitors to Multnomah county and 530 people self-reported as being neither a resident of nor a visitor to Multnomah county, which could account for some of the “Someplace else in Oregon” and “Someplace else in Washington” responses if they did not know what county they were in.

Data is needed from wireless providers serving the region who carried the alert notification to help us better understand the actual overspray of the alert. Based on survey responses and corroborated by individuals who provided email feedback that they were just over the border in Washington or Clackamas county and did not receive the alert, overspray was very limited and even less than what we initially anticipated.

## Question 2: Cell phone operating system

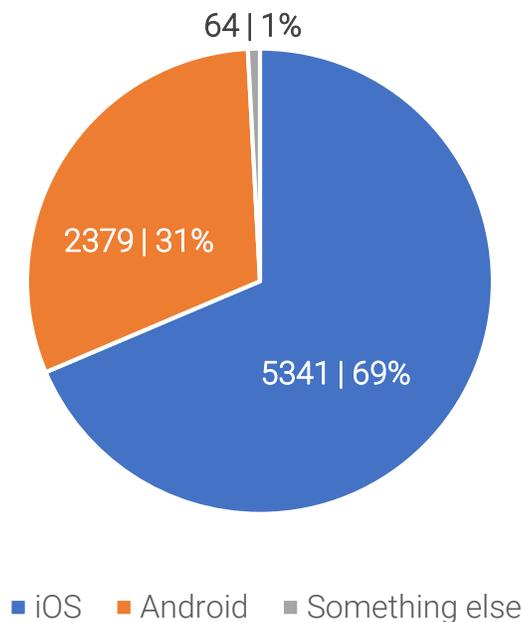


Table 2. Cell phone operating system

There were 7,715 responses to this question; 191 people skipped this question. About 69% of respondents said their device was using an iOS operating system, indicating an

### *Results: Post-test Survey*

Apple product. About 31% self-reported that their device was using an Android operating system.

There were 64 responses, or less than 1% of the total, who said their device's operating system was something else. While there are other cellular operating systems, such as Tizen (e.g., Samsung Galaxy watches), Sailfish (e.g., Jolla and Sony Xperia devices), Ubuntu Touch, (e.g., Pine64 devices), and Harmony (Huawei devices), it is also possible some respondents did not know their device's operating system. The survey did not ask people who responded with "something else" to identify their device's operating system.

### **Question 3: Cell phone make and model**

There were 6,836 responses to this question; 1,070 people (13%) skipped this question or indicated that they did not know the make or model of their phone. There were 484 people who responded that their device's operating system is iOS, but did not answer what the make and model of their device is. Nevertheless, they can be assumed to be Apple products, whether iPhones, iPads, or Apple watches.

While the top-reported device brands were iPhones and Samsung Galaxy S-series phones and tablets, there were at least 35 different brands of phones reported among those who received the alert. (See Table 3 on the next page for a disaggregation of reported makes and models.)

Phone make/model	Number	Phone make/model	Number
iPhone unknown model	980	REDMAGIC	4
Samsung Galaxy S-series	905	Nothing Phone	4
iPhone 16 series	897	Gemini	4
iPhone 13 series	683	Cricket	4
iPhone 15 series	647	Blu	4
iPhone 14 series	645	Unihertz	3
iPhone 12 series	413	iPhone 9	3
Google Pixel series	369	Asus Zenphone series	3
iPhone 11 series	221	T-Mobile Metro	2
Samsung Galaxy A-series	212	PCD	2
Motorola Moto G series	127	Oppo	2
iPhone X series	123	Kyocera	2
Apple watch series	120	Huawei	2
iPhone 8 series	76	Fairphone	2
Motorola unknown model	67	Consumer Cellular	2
Samsung Note	31	Cat	2
OnePlus	28	Vortex	1
iPhone 7 series	22	Vivo	1
LG	20	Umigidi Bison	1
iPhone 6 series	20	Tracfone	1
Motorola Edge series	13	Summit	1
Samsung Z fold	12	Sony Xperia	1
Samsung Z flip	11	Snapdragon	1
Nokia	10	Samsung OnePlus	1
Motorola Razr series	9	Samsung Galaxy M-series	1
T-Mobile REVVL	8	iPhone 4	1
TCL	7	Epson	1
iPhone 5 series	6	Cloud	1
AT&T Calypso series	5	Bark	1
ZTE	4	Acer	1
Samsung Galaxy J-series	4		

Table 3. Device makes and models

### Question 4: Cell phone carrier

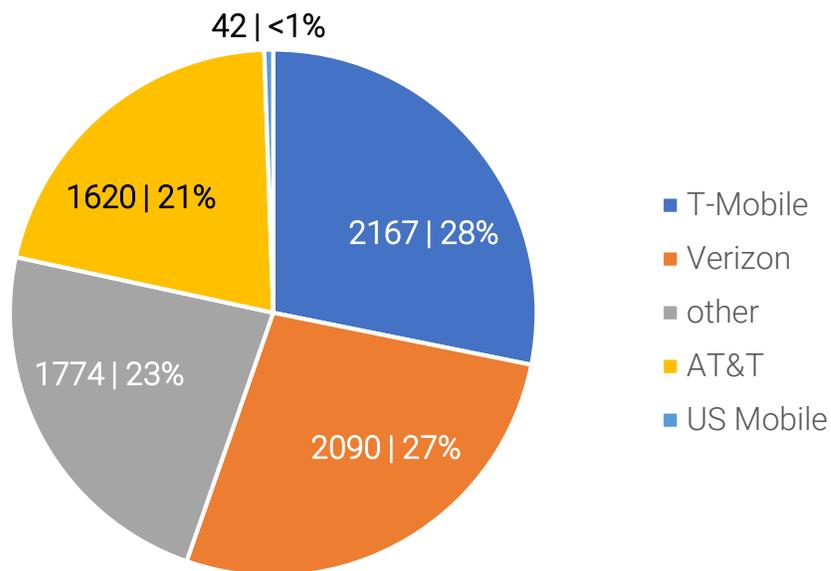


Table 4. Cell phone carrier

There were 7,693 responses to this question; 213 people skipped this question. About a quarter of the respondents reported that their wireless carrier was either T-Mobile (28%) or Verizon (27%). About 21% of respondents said AT&T is their wireless carrier. Just one half of one percent of respondents reported that their wireless carrier was US Mobile, a MVNO that uses the Verizon, AT&T, and T-Mobile networks.

At least 23% of respondents reported that their wireless provider was something else. For this response, respondents had the option to enter their wireless provider. Of the 1,774 who selected "other", 1,297 (73%) named an MVNO.

VMNO	Number	VMNO	Number
Comcast Xfinity	375	Walmart Family Mobile	4
Mint Mobile	188	Pure Talk	3
Consumer Cellular	142	Patriot Mobile	3
Google Fi	130	CenturyLink	3
Cricket Wireless	114	TextNow	3
Metro	85	Assurance Wireless	2
Boost Mobile	57	Lyca Mobile	2
Visible Wireless	38	Total Wireless	2
Tracfone	22	Republic Wireless	1
Straight Talk	20	O2 (UK)	1
CREDO Mobile	18	Previ	1
Tello Mobile	15	Puppy Wireless	1
U.S. Cellular	14	Bark Mobile	1
Ting Mobile	13	Fastweb (Italy)	1
Spectrum Mobile	10	Helium	1
Access Wireless	8	Net10	1
FirstNet	6	Ultra Mobile	1
Simple Mobile	6	TruConnect	1
Redpocket Mobile	4		

Table 5. Reported MVNOs

The most popular MVNO was Comcast Xfinity, which operates on the Verizon network, with 29% of people who responded. Second was Mint Mobile, which operates on the T-Mobile network, with 14% of respondents. Third was Consumer Cellular, which operates on both AT&T’s and T-Mobile’s networks, with 11% of respondents. Google Fi, which also operates on T-Mobile’s network, came in fourth with 10% of respondents.

In total, there were 37 different MVNOs reported, including those operated by one of the major networks, such as Total Wireless and Visible, which are owned by Verizon. Metro, Mint, and Ultra are owned by T-Mobile. Cricket is owned by AT&T.

A few of the reported MVNOs use multiple networks. The ones that use AT&T, T-Mobile, and Verizon include Patriot Mobile, Puppy Wireless, Redpocket Mobile, Straight Talk, and Tracfone. Operators that use AT&T and T-Mobile included Consumer Cellular, O2 (UK), and Previ. Boost Mobile also uses these as well as the Dish network. Meanwhile, TruConnect uses the T-Mobile and Verizon networks.

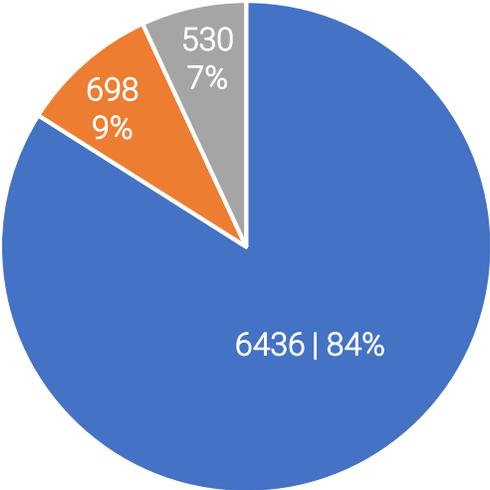
Reported MVNOs that just use the Verizon network include Access Wireless, CREDO Mobile, Simple Mobile, Spectrum Mobile, Ting Mobile, Total Wireless, and Visible Wireless.

*Results: Post-test Survey*

MVNOs that only use the T-Mobile network include Assurance Wireless, Bark Mobile, Fastweb (Italy), Google Fi, Helium, Lyca Mobile, Metro, Mint Mobile, Net10, Tello Mobile, TextNow, U.S. Cellular, Ultra Mobile, and Walmart Family Mobile.

Cricket Wireless, FirstNet, Pure Talk and Republic Wireless all use only AT&T’s network. CenturyLink, which three users reported, relies on its own DSL network.

**Question 5: Resident or visitor**



- Resident of Multnomah County
- Visitor to Multnomah County
- Neither a resident nor a visitor to Multnomah County

*Table 6. Resident or visitor*

There were 7,664 responses to this question; 242 people skipped this question. Over 84% of the respondents self-reported as residents of Multnomah county. About 9% of respondents self-reported as visitors to the county.

Nearly 7% of respondents self-reported as neither a resident of nor a visitor to Multnomah county at the time of this test. This number exceeds the number of people who self-reported that they received the message in another county outside Multnomah county. However, because the survey did not ask for more information on where these respondents were, it is possible that some people—visitors, for example—chose this if they did not know whether or not they were in Multnomah county. It’s also possible that people passing through the county, or people from other counties who were in Multnomah county at the time—people who work in Multnomah county, but live elsewhere, for example—did not consider themselves to be visitors.

Nevertheless, the overwhelming number of respondents self-reporting as being residents of Multnomah county supports the success of the test alert in reaching most residents as well as the minimal effects of overspray. Further analysis of responses to the [Non-recipient Survey](#) in the next section will help clarify potential gaps within the county where the test alert was not received.



## Results: Survey of Non-recipients

Between August 15, 12:24 p.m. and August 22, 11:29 p.m., 374 responses were received. Of those, 45 people responded to the question asking where in Multnomah county they were at the time of the alert with “none of these” and five people skipped this question. The question provided 23 common names of municipalities and unincorporated communities across Multnomah county, asking people to pick the location closest to them. It is therefore assumed that “none of these” indicates respondents who were outside Multnomah county at the time of the alert and would not have received the message, so their responses were removed from this analysis. Because it was important to this survey that responses were only collected from people who self-reported to be in Multnomah county at the time of the alert, the answers of the five who skipped this question were also removed from the analysis, leaving the final total of 324 responses.

The survey asked 11 questions designed to clarify some of the preliminary feedback we had received via email on August 14 following the alert test from people who said they did not receive the alert and thought they should have.

We wanted to better understand specifically where within the county people who did not receive the alert were when it was sent. We also wanted to learn more about other possible factors—such as phone makes and models, cellular providers, or phone settings—may have contributed to the lack of receipt.

This survey was shared on social media and directly with our direct contacts (see [Appendix 3](#)) for the widest possible propagation. We also asked specific people in parts of the county previously known to have suboptimal cell phone reception—Corbett, Sauvie Island, and West Hills—to share the survey link as broadly as possible, including posting on local social media groups.

Like the survey we created for people who received the alert to complete, we aimed to keep this survey as simple as possible with mostly multiple-choice answers to gather the most basic information while motivating as many people as possible to respond. Personal information, including geotagging data, was not collected and all questions were optional.

Unlike the survey for people who received the alert, this survey was not translated into any other languages due to a lack of time and an interest in disseminating the survey broadly while people’s memories were fresh.

## Summary

While 80% of respondents were aware of WEAs prior to the test, 20% were either unaware or unsure. This suggests a continued need for public education regarding these alerts. This question would have been beneficial in the survey for those who did receive the alert to have a larger pool of responses to measure awareness.

### *Results: Survey of Non-recipients*

A majority of respondents reported either having only one cellular device or having multiple devices but only one failed to receive the alert. Conversely, 28% indicated more than one device failed to receive the alert, warranting further investigation into potential correlations with geographic location or device settings. A small percentage (7%) were unsure.

A significant majority (70%) of non-recipients were in or near the City of Portland, with another 18% in other urban areas of Multnomah county. Only 10% were in rural unincorporated areas. This distribution suggests that for most respondents, non-receipt was likely due to device notification settings rather than transmission issues, especially in urban centers with good cell tower coverage. We anticipated challenges in rural areas due to suboptimal coverage, despite limited responses from those areas.

The results for operating system (iOS vs. Android) and device make/model were similar to those from individuals who did receive the alert. This reinforces the conclusion that these factors are not significant in determining alert receipt within the targeted area.

Verizon was the most common carrier (41%), followed by a near-equal distribution of T-Mobile and AT&T subscribers, and a smaller percentage of Xfinity users. The diversity of subscriber networks among non-recipients, mirroring those who received the alert, indicates that the carrier is likely not a significant factor in alert delivery.

Over 95% of non-recipients confirmed their device was turned on during the alert period, ruling out this as a primary reason for non-receipt for the vast majority. The survey did not inquire about "airplane mode," a possible omission as it would prevent alert receipt. However, the number of people who responded that they were connected to a Wi-Fi network during the test indicates that most respondents' devices were not set to airplane mode.

Just over half of non-recipients were not actively using their device when the alert was sent, while 10% were. A substantial 39% were unsure, highlighting a potential area for future survey clarity.

Nearly 60% of non-recipients had their device connected to Wi-Fi, while the remaining 40% were split between not connected or unsure. The survey did not ask about cellular data connection, another potential factor.

Over three-quarters of respondents were unsure if they had opted out of any alert types. Among those who did know, AMBER alerts and "Test alerts" were the most common types opted out of (13-14%). The difficulty in this question lies in varying terminology across different phone models. Opting out of test alerts, it should be noted, should not be a factor in this test, as we used "live" codes, not "test" codes, to send the notification, as if it were an actual WEA.

Nearly 60% were unsure if they had any specific alert settings toggled on. Among those who knew, 22% had "vibration" on, and 20% had "always alert at full volume" or "always

play sound" enabled (overriding "do not disturb" and "focus" modes in most phones). Only a small percentage (7%) had "alert reminders" on, and even fewer (8 people) used "speak alert message", which is useful for low vision or blind individuals. Just two people reported "do not disturb while driving" being on. Similar to the question on alert settings, terminology differences across phones posed a challenge.

The analysis suggests that the primary reasons for not receiving the WEA test alert are more likely related to individual device notification settings (particularly opting out of certain alert types, or having "Do Not Disturb" active without override settings), and less so to factors like operating system, device make or model, or cellular carrier.

The high percentage of respondents unsure about their alert settings points to a lack of user familiarity with these options, suggesting an opportunity for public education on managing WEA settings. While location plays a role in signal strength (especially in rural areas), the majority of non-recipients in urban areas further emphasizes the importance of device-level settings. The survey could be improved by including questions about "airplane mode" and cellular data connection status, and by simplifying the language used for notification settings to account for variations across phone models.

### Question 1: Awareness of Wireless Emergency Alerts

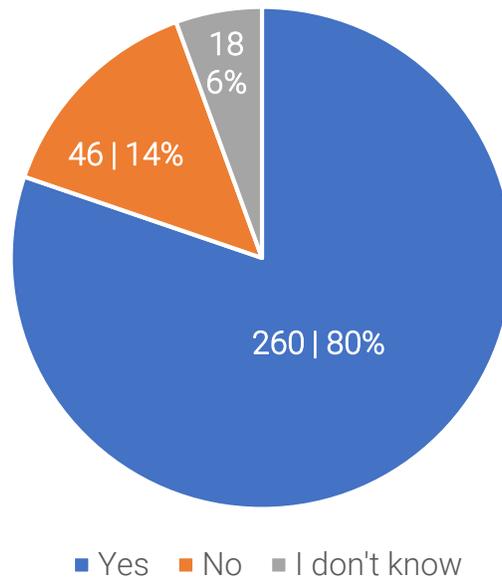
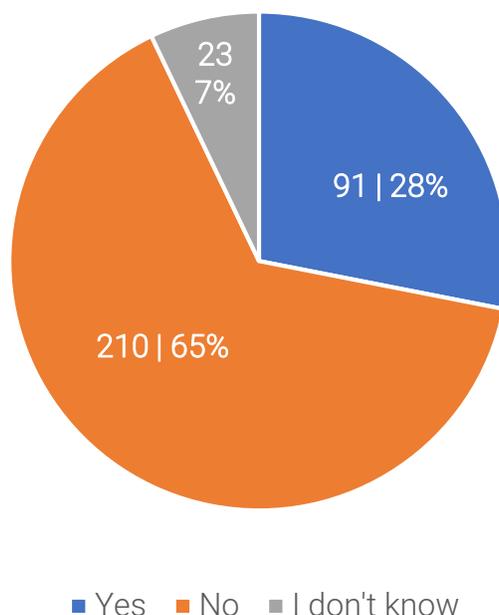


Table 7. Awareness of Wireless Emergency Alerts

There were 324 responses to this question; no one skipped this question. At least 80% of respondents acknowledged that they had heard of WEAs before this test.

About 20% said they were not aware or they weren't sure. This question would also have been good to include in the survey of people who received the test.

## Question 2: Multiple devices that didn't receive the alert



*Table 8. Multiple devices that didn't receive the alert*

There were 324 responses to this question; no one skipped this question. About 65% of respondents said they did not have multiple devices that did not receive the alert, which could be interpreted to be that either they only have one cellular device, such as a cell phone, tablet or smart watch, or that they do have multiple devices but only one did not receive the alert. This was supported by at least one email we received from a Multnomah county resident who wanted to understand why his smart watch received the alert but his cell phone did not.

About 28% self-reported that they had more than one device that did not receive the alert. Further analysis of subsequent responses is needed to determine if this was potentially associated with their geographic location within the county or the notification settings on their devices.

Just 23 people, or 7% of respondents, said they did not know whether multiple cellular devices they own did not receive the alert.

### Question 3: Location in Multnomah county at the time of the alert

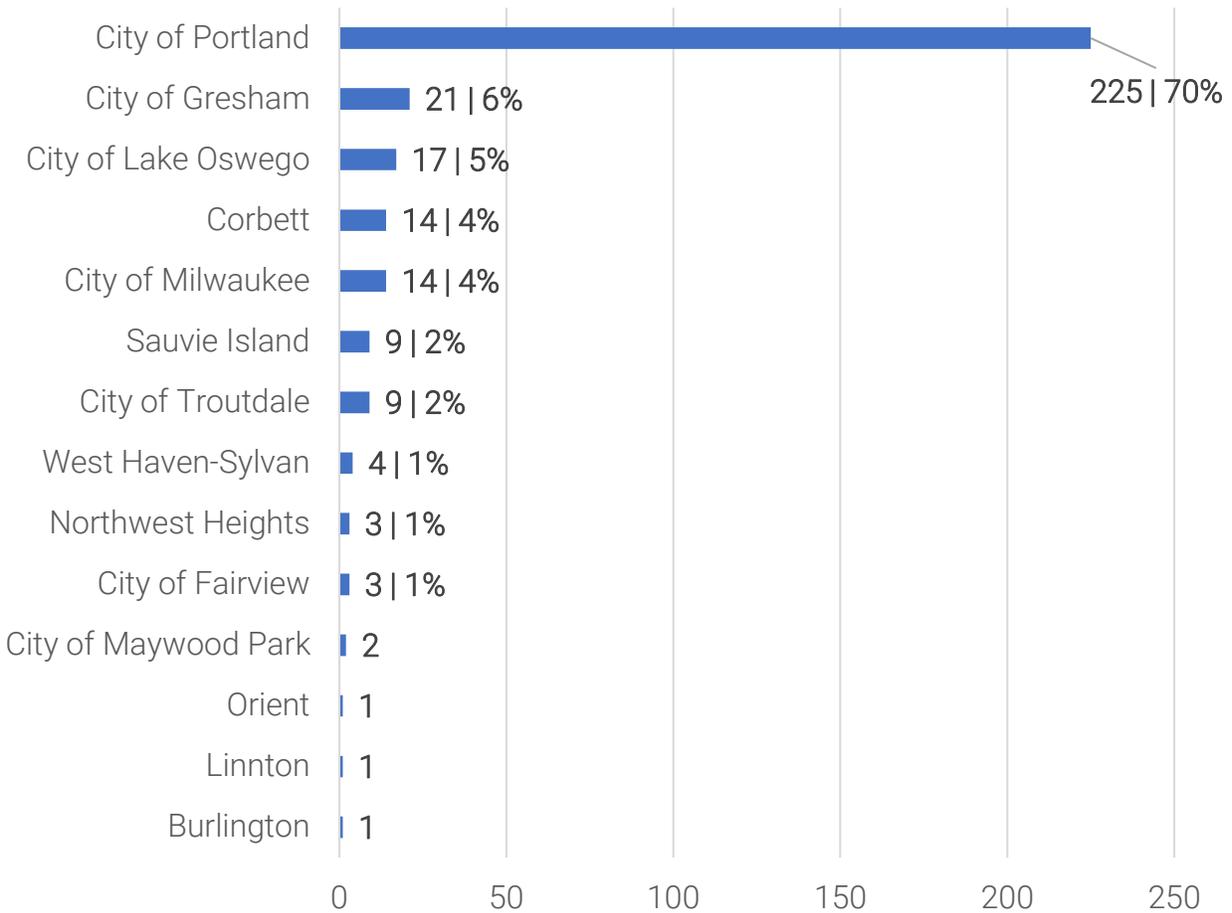


Table 9. Location in Multnomah county at the time of the alert

There were 324 responses to this question; no one skipped this question. Respondents could only select one location out of 23 options. (Please see [Appendix 5 – Non-recipient Survey](#), Question 3 for a complete list of municipalities and common names for unincorporated neighborhoods across the county.)

We received 225 responses, or 70% of the total number of responses, from people self-reporting to be in or near the City of Portland. An additional 66 people, or about 18%, self-reported to be in a city that is within the urban areas of the county. Notably, only small portions of Lake Oswego and Milwaukee are within the county’s borders. Most of these two cities are located in neighboring counties.

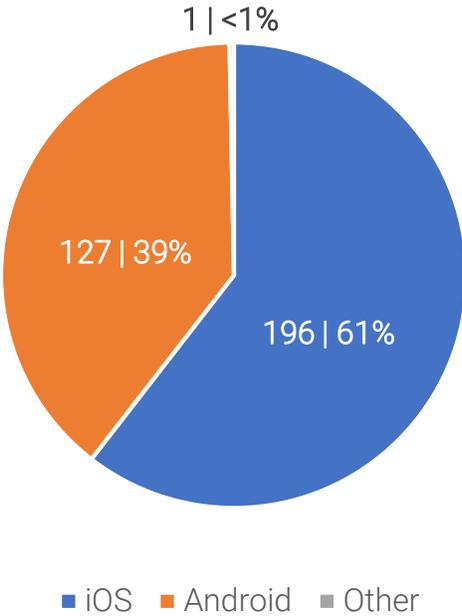
Just 33 people, or about 10% of respondents, self-reported being in one of our rural unincorporated areas.

*Results: Survey of Non-recipients*

This indicates that for the majority of respondents who self-reported their location in one of our urban centers, the reason for not receiving the notification is more likely due to their device’s notification settings than to a transmission issue.

Though there were only a limited number of responses from Corbett, Sauvie Island, West Haven-Sylvan, Orient, Linnton, and Burlington, we anticipated that receipt of the alert in these unincorporated areas would be challenging due to suboptimal cell tower coverage in these areas, many of which are rural.

**Question 4: Cell phone operating system**



*Table 10. Cell phone operating system*

There were 324 responses to this question; no one skipped this question. People were asked to identify if their primary cellular device that did not receive the alert was using an iOS or Android operating system, or something else.

The responses to this question were similar to those who responded to the survey that received the alert, reinforcing the conclusion that the operating systems of cellular devices are not a significant factor in whether or not a cellular device in the targeted area could receive the alert.

Only one person responded with “something else”. The survey did not provide any follow-up option to identify what other operating system they are using.

### Question 5: Cell phone make and model

Phone make/model	Number	Phone make/model	Number
iPhone 16 series	46	Samsung Galaxy Note series	4
Samsung Galaxy S series	46	iPhone X series	3
Google Pixel	37	OnePlus unknown model	3
iPhone 15 series	36	LG unknown model	2
iPhone 14 series	32	Motorola Razr series	2
iPhone 13 series	20	Samsung Galaxy Z series	2
iPhone 12 series	19	iPhone 6 series	1
iPhone unknown model	18	iPhone 8 series	1
iPhone 11 series	11	Motorola Moto Z series	1
iPhone SE	10	Orbic Journey	1
Motorola Moto G series	10	Sky Elite E55	1
Samsung Galaxy A series	10	Sonim XP3	1
Samsung unknown model	6	T-Mobile unknown model	1

*Table 11. Cell phone make and model*

There were 324 responses to this question; no one skipped this question. People were asked to enter the make and model of their primary device that did not receive the alert.

Like the previous question, the responses to this question were similar to those from people who received the alert, again reinforcing the conclusion that the brand and model of the cellular device is not a significant factor in whether or not someone could receive an alert in the targeted area.

### Question 6: Cell phone carrier

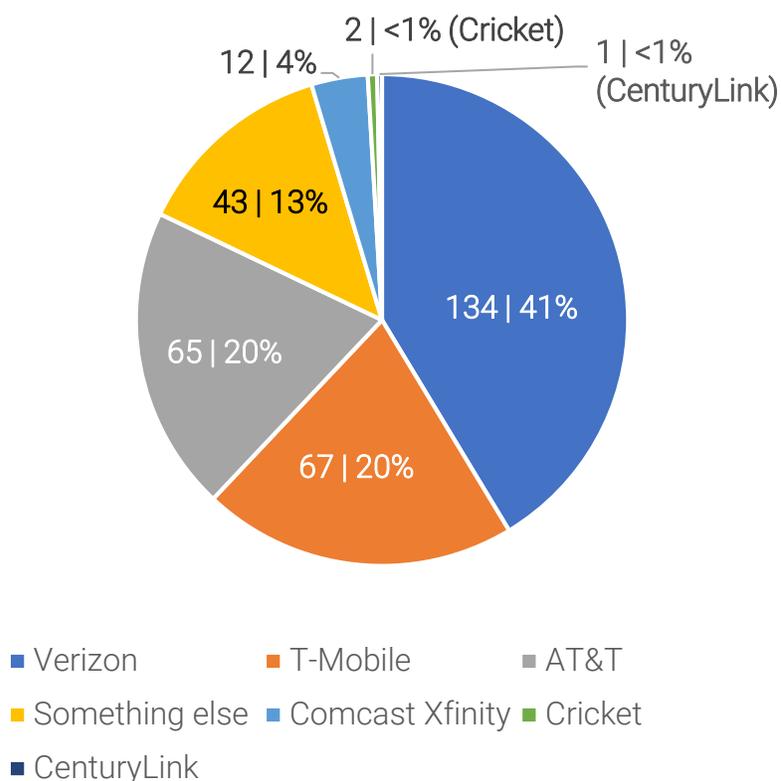


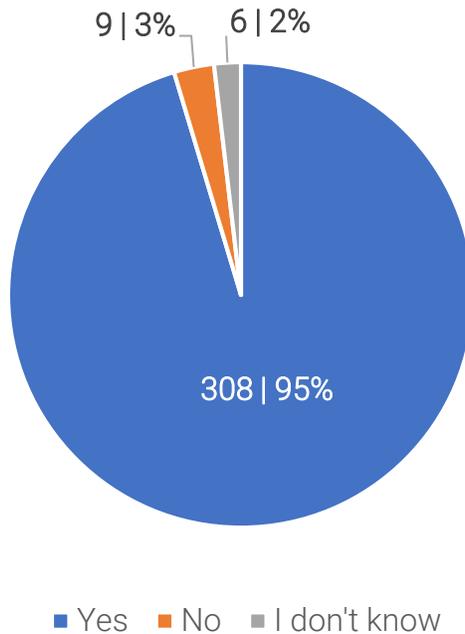
Table 12. Cell phone carrier

There were 324 responses to this question; no one skipped this question. Unlike in the survey of people who received the alert, for this survey we provided more options among major networks and MVNOs, but we did not give the option for respondents who selected “something else” to identify what MVNO they are using.

There were 134 people, or 41% of the responses, who self-reported that their carrier is Verizon. There was nearly equal distribution among T-Mobile and AT&T subscribers, at 67 and 65 responses, respectively. Twelve people, or 4% of the responses, were from people who reported subscribing to Xfinity.

The diversity of subscriber networks is similar to those who received the alert, indicating that this may not be a significant factor in the delivery of the alert.

### Question 7: Cell phone turned on



*Table 13. Cell phone turned on*

There were 323 responses to this question; one person skipped this question. Unremarkably, over 95% of the responses indicated that their primary device that did not receive the alert was, in fact, turned on during the period the alert was sent.

Just nine people responded that the device was not turned on, and six people responded that they didn't know.

The survey did not ask respondents whether the device was set to "airplane mode", which would have been a factor in not receiving the alert.

A subsequent question asks whether the device was connected to wifi, but there were no questions asking whether the device was alternatively connected to data only.

### Question 8: Using cell phone during the test

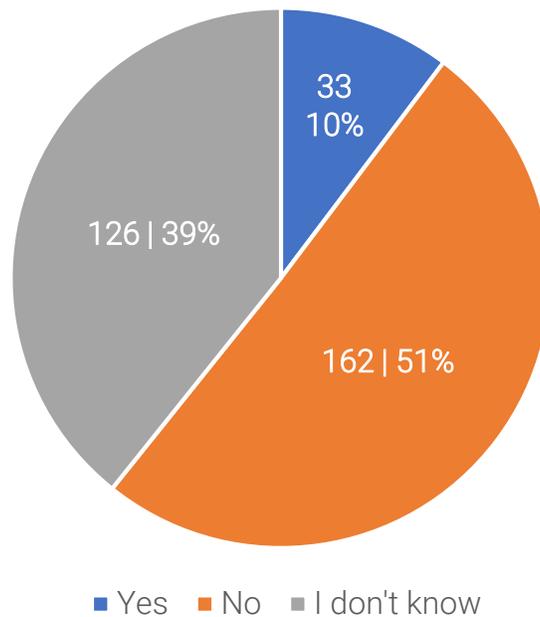


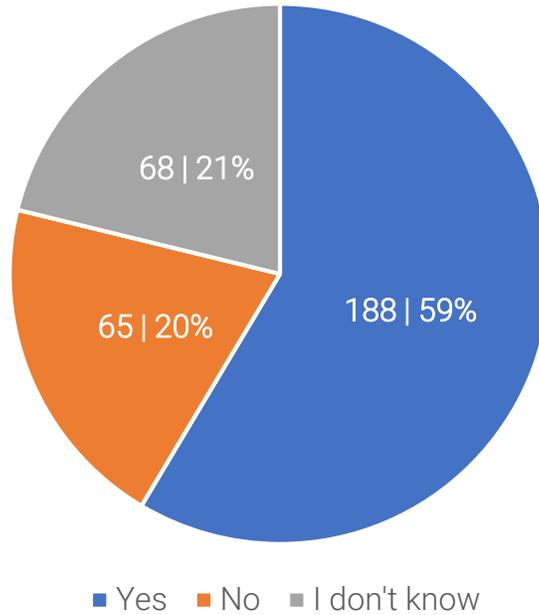
Table 14. Using cell phone during the test

There were 321 responses to this question; three people skipped this question. This question asked if people were using their phone at the time of the alert, such as in the middle of a phone call or checking email.

Just over half of the respondents, or 162 people, reported that they were not using the device that did not receive the alert at the time the alert was sent out.

There were 33 responses, or 10% of the total, that affirmed they were using their device at the time. Meanwhile, 126 people, or 39% of respondents, were not sure if they were using the device or not.

### Question 9: Cell phone connected to wifi during the test



*Table 15. Cell phone connected to wifi during the test*

There were 321 responses to this question; three people skipped this question. This question asked if the primary device that did not receive the alert was connected to a wifi network at the time of the alert.

Nearly 60% of the responses affirmed that their device was connected. The remaining 40% of responses were evenly split between not connected or they didn't know.

## Question 10: Cell phone alert settings

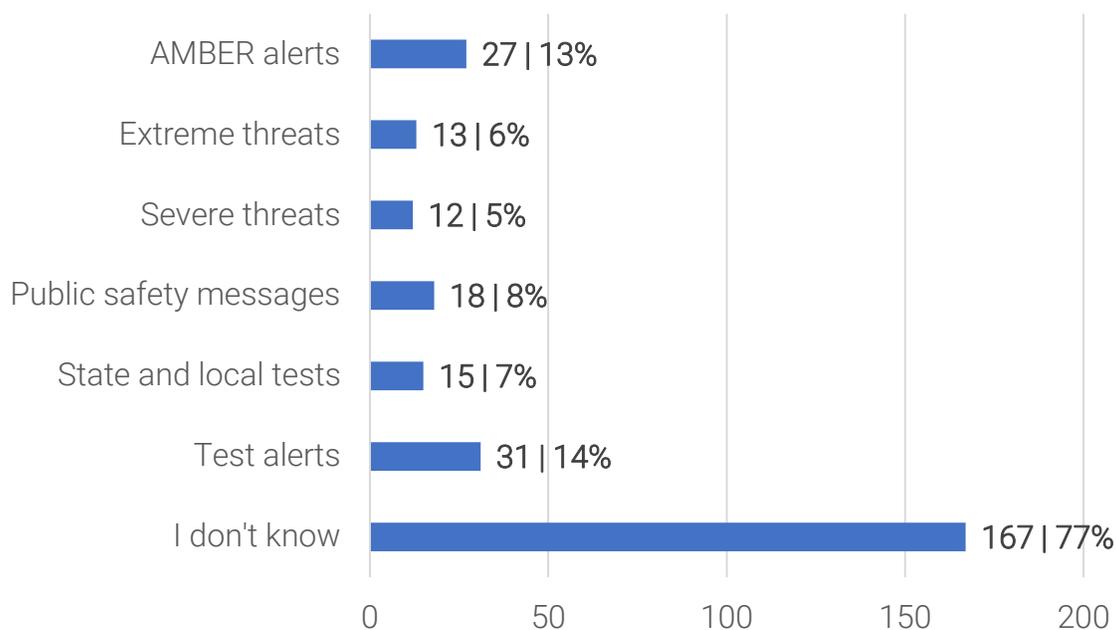


Table 16. Cell phone alert settings

There were 216 responses to this question; 108 people skipped this question.

Respondents were able to select multiple answers to this question, which asked if any of these notification settings were toggled off, meaning they have opted out of receiving these types of notifications.

Unsurprisingly, over three quarters of respondents were not sure if they had opted out of any of these alerts.

Meanwhile, the most common alerts people reported opting out of were AMBER alerts and Test alerts. About 13 to 14% of respondents reported opting out of these alerts. To a lesser extent, between 5 and 8% of respondents reported opting out of other alert types.

This is consistent with the findings of the RAND Corporation in their assessment of the October 2023 national alert test<sup>9</sup>, which indicated that 10-20% of Oregonians opted out of certain alerts through their devices' notification settings.

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<sup>9</sup> Parker, Andrew M., Rachel Steratore, Melissa A. Bradley, Salimah LaForce, Dulani Woods, Claude Messan Setodji, Gabriel W. Hassler, Devin Tierney, Carlos A. Villegas, Gary Cecchine, Brian A. Jackson, Chuck Story, Katie A. Wilson, Mohammad Ahmadi, and Jan Osburg, **Assessing Public Reach of the 2023 National Test of the Wireless Emergency Alerts (WEA) System: Results of a National Survey**. *Homeland Security Operational Analysis Center operated by the RAND Corporation, 2024*, p. 73. [https://www.rand.org/pubs/research\\_reports/RRA2451-1.html](https://www.rand.org/pubs/research_reports/RRA2451-1.html). Also available in print form.

The difficulty with this question is that different phones call these notification settings different things. The options for this question were taken from the notification settings for iPhone 14 and Samsung Galaxy S25.

### Question 11: Cell phone notification settings

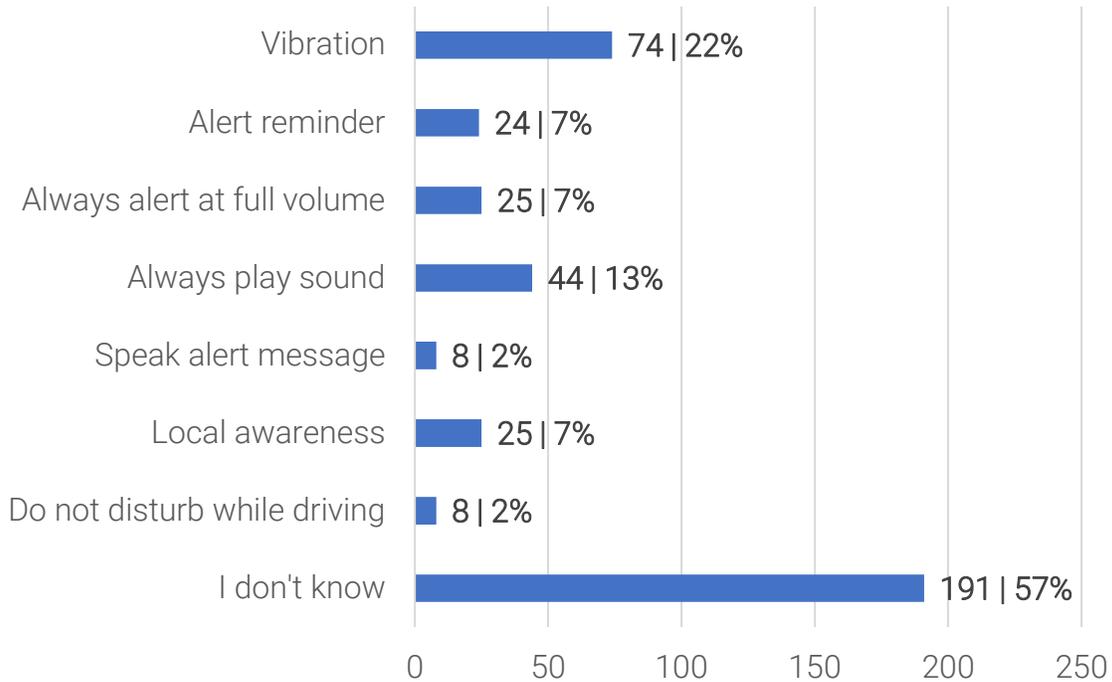


Table 17. Cell phone notification settings

There were 287 responses to this question; 37 skipped this question. Respondents were able to select multiple answers to this question, which asked if any of these alert settings were toggled on.

The “local awareness” option, which 7% said they had turned on, is meant to improve the phone’s location tracking to ensure that only alerts intended for that location are received. It is meant to help minimize “overspray” effects from cell towers.

Nearly 60% of respondents were not sure if they had any of these settings toggled on.

About 22% reported that they had the “vibration” setting turned on, which would help them recognize when an alert arrives on their phone.

There were 69 people, or 20%, who reported that they had either “always alert at full volume” or “always play sound” turned on, meaning that they enabled their devices to override any “do not disturb” or “focus” settings on their device to receive an alert.

Just 7% said they had “alert reminders” turned on, meaning that their device will continue to emit reminders until the alert has been acknowledged.

### *Results: Survey of Non-recipients*

Only eight people reported having turned on their “speak alert message” setting. This is a particularly useful setting for people with low vision or who are blind as it uses text-to-speech technology to read the alert message to the recipient.

Just two people responded that they had “do not disturb while driving” turned on, which could prevent them from receiving an alert while in motion.

The difficulty with this question is that different phones call these notification settings different things. The options for this question were taken from the notification settings for iPhone 14 and Samsung Galaxy S25.

## **Initial Findings and Recommendations**

This report details the initial findings from Multnomah County's live Wireless Emergency Alert (WEA) test, highlighting both the system's effectiveness and areas for improvement. The test successfully demonstrated highly localized message delivery, with 91% of recipients within the county and over 84% being Multnomah county residents, validating the system's ability to reach its intended local demographic across various devices and carriers. This confirms WEA's potential as a highly effective tool for targeted emergency communication.

However, the findings also reveal critical challenges related to public awareness and individual device settings, which were primary factors for non-receipt, even in urban areas with good cell coverage. These gaps underscore the need for a multi-modal approach to emergency alerts. Based on these insights, the report provides recommendations to enhance public education on emergency alert systems and device settings, promote registration for PublicAlerts and Nixle, regularly test alert systems, standardize alert terminology, and improve data collection and analysis for future alert deployments.

The comprehensive planning around public information, including direct communication with myriad organizations, was successful. The 911 dispatch center for Multnomah County reported receiving just one phone call, from someone who did not receive the test. Additionally, 311 reported receiving just one call. Neither 211 nor any of the neighboring jurisdictions reported receiving any phone calls related to this alert.

Following are the key findings from an analysis of this test, followed by recommendations and opportunities for further research.

### **Key findings**

#### **Effectiveness of WEA delivery and reach**

The live WEA test conducted by Multnomah County demonstrated success in highly localized message delivery, with approximately 91% of recipients reporting being within the county. This suggests successful geographic targeting and minimal overspray into neighboring areas, though definitive data from wireless providers remains outstanding.

The test successfully reached a broad spectrum of users across various device operating systems (iOS and Android) and major cellular carriers (T-Mobile, Verizon, AT&T, and numerous MVNOs), indicating that these factors are not significant barriers to alert receipt within the targeted area.

The overwhelming majority of respondents (over 84%) were Multnomah County residents, validating the system's ability to reach its intended local demographic.

## **Public awareness and device settings as key factors in non-receipt**

While 80% of non-recipients were aware of WEAs prior to the test, 20% were not, highlighting a persistent need for public education.

The primary reasons for non-receipt appear to be linked to individual device alert and notification settings rather than widespread transmission issues. A significant majority of non-recipients (70%) were located in urban areas with generally good cell tower coverage, further emphasizing the role of device settings. Over three-quarters of non-recipients were unsure if they had opted out of any alert types, and nearly 60% were unsure about specific alert settings, indicating a general lack of user familiarity with these options. Common opt-outs among those who knew were AMBER alerts and test alerts, consistent with broader findings for Oregonians, but not a factor for non-receipt of this live WEA alert.

## **Implications for using WEA during emergencies**

The results underscore the potential for WEA to be a highly effective tool for localized emergency communication in Multnomah county. The demonstrated accuracy in geographic targeting means that WEAs can be confidently deployed to reach affected populations during an emergency, minimizing unnecessary alerts in unaffected areas. The broad reach across diverse devices and carriers ensures that a significant portion of the population will receive critical information.

However, the findings regarding non-receipt highlight a crucial challenge. Emergency Management must continue to anticipate and plan for potential communication challenges in rural areas due to suboptimal cell tower coverage. Additionally, even with effective transmission in more urban areas of the county, individual device settings and user awareness can create significant gaps in alert delivery.

During a real emergency, these gaps could have serious consequences, especially for vulnerable populations or those who have not enabled emergency notifications. The high percentage of non-recipients in urban areas likely due to device settings reinforces the necessity for a multi-modal approach to emergency alerts.

## **Recommendations**

### **Enhance public education on the different types of emergency alert and warning systems**

Continue and expand public education campaigns to raise awareness about WEAs in general, as 20% of recipients were unaware or unsure of them. It should be part of a continuous public information and education campaign on the multiple ways we will communicate emergency alerts and warnings. This includes leveraging PublicAlerts (opt-in notifications), traditional media (television, radio, internet, and print), social media, and community outreach.

This approach helps to overcome limitations of WEA, such as individual device settings or limited cell coverage in certain areas, and promotes broader public awareness of official channels of communication of critical information during emergencies.

### **Promote registration for PublicAlerts and Nixle**

Multnomah County does continuously promote registration for PublicAlerts, the County's opt-in community emergency notification system, through outreach events and regionally there are periodic campaigns promoting the system. Nevertheless, it was clear from the survey of non-recipients and several emails we received that a certain percentage of the population remain unaware or unsure of WEAs or conflate WEAs, which are geographically targeted and do not require registration, with PublicAlerts, which does require registration and is tied to a specific address in the registration.

Additionally, Multnomah County has another messaging tool that it has not yet employed called Nixle. Nixle is another opt-in system, owned by Everbridge, but it is different from PublicAlerts, which requires users to register personal information, such as phone numbers, email addresses, and physical addresses. Nixle users remain anonymous; they only need to register their ZIP code or follow a specific hashtag word established by Multnomah County to receive geographically-focused messages about local events, public safety hazards, and other community-related information.

Though Multnomah County has never promoted Nixle, and currently is not using this service, over 76,000 people have registered a ZIP code within the county. Communicating emergency alerts and warnings tied to a ZIP code or a hashtag word is an additional method for communicating general information on public safety hazards to communities.

The County will always use a multi-modal approach to disseminating critical information during emergencies, and the more people who are registered with PublicAlerts across the county, the more likely they are to receive that information directly from us, especially when it includes recommended life-safety actions for locations imminently affected by a disaster or crisis.

### **Enhance public education on device settings**

A high percentage of non-recipients were unsure about their devices' alert and notification settings. There is a critical need for a continuous public education campaign to inform individuals about how to manage their devices' alert and notification settings.

This should include clear, accessible guidance on how to enable all emergency alerts, including device alert and notification settings that override "Do Not Disturb" or "Focus" modes. Educational materials should be made available in multiple languages and accessible formats.

## **Regularly test the PublicAlerts and WEA systems**

The region, through the RDPO Emergency Alert and Warning Working Group, is already working on regional recommendations for regularly live testing the WEA system. There is already regular regional live testing of the Emergency Alert System, which is broadcast by a different county in the region on a rotating basis on even months over television and radio stations.

We recommend additionally conducting regular tests of the PublicAlerts opt-in community emergency notification system as part of an ongoing public information and education campaign.

## **Standardize alert and notification terminology in device settings**

We recommend that the FCC and the Federal Emergency Management Agency's Integrated Public Alerts System (IPAWS) group work with mobile phone manufacturers to standardize or clarify the terminology used for alert and notification settings across different phone brands and models to reduce user confusion.

## **Improve data collection and analysis**

We recommend that the Oregon SWIC actively pursue partnerships and data-sharing agreements with the commercial mobile service providers to obtain device-based and network monitoring data from future tests or actual events. This data is essential for a definitive assessment of actual WEA reach and overspray, and for refining targeting strategies.

## **Refine survey instruments**

If future surveys are conducted, incorporate lessons learned from this test. For recipient surveys, include a question about prior awareness of WEAs. Include questions about "airplane mode" and cellular data connection status in non-recipient surveys. Consider including questions on demographics to measure notification reach to traditionally underserved communities, limited English proficient communities and persons with access and functional needs. Consider employing geotagging capabilities in future surveys, with appropriate privacy safeguards and public notification, to gain more granular location data.

## **Future research**

### **Wireless provider data analysis**

If we are able to receive information or data from the SWIC or wireless providers, conduct a definitive assessment of actual overspray and areas within Multnomah county that did not receive the alert. This would provide a more accurate measure of the alert's reach and complement the self-reported survey data.

### **In-depth analysis of non-recipient data**

Conduct a rigorous statistical analysis of the non-recipient survey responses, potentially using focus group discussions or key informant interviews to delve deeper into the reasons for non-receipt, particularly in urban areas. This could involve segmenting data by demographic factors, device types, or cellular carriers to identify specific vulnerabilities.

Conduct targeted research in rural unincorporated areas to better understand the challenges of alert receipt in those regions. This could involve small-scale tests or in-depth interviews with residents in areas with suboptimal cell tower coverage.

### **Impact of user education on alert receipt**

Design and implement a study to measure the effectiveness of targeted public education campaigns on increasing receipt rates or emergency alert notifications, particularly among populations identified as having lower awareness or who are more likely to have opted out of alerts.

### **WEA effectiveness in geographically challenging areas**

Conduct more targeted tests or studies in Multnomah county's rural and remote unincorporated communities (e.g., Corbett, Sauvie Island, West Hills, Orient, Linnton, Burlington) to precisely assess WEA signal strength and delivery rates in areas known for suboptimal cell tower coverage. This research could inform decisions about infrastructure improvements or alternative alerting methods in these areas.

By pursuing these research avenues, future alert deployments can be further optimized for reach, accuracy, and public understanding.



## **Appendix 1 – Public Information and Education Plan Outline**

A complete PDF copy of Multnomah County’s public information and education plan for this test is available upon request to [emergency.management@multco.us](mailto:emergency.management@multco.us) . Below is a summary of the content headings.

1. Introduction
  - a. Purpose
  - b. Background
  - c. Situation
  - d. Assumptions
    - i. Public Response and Awareness
    - ii. Test Environment and Constraints
2. Concept of Operations
  - a. PIO Coordination
    - i. Initial Coordination with PIOs (checklist of tasks and lists of local, regional, tribal, and state [OEM] PIOs)
  - b. Messaging Guidance (checklist)
3. Public Messaging
  - a. Key Points (checklist)
  - b. Communication Channels (checklist)
  - c. Public Feedback
    - i. Feedback Mechanism (checklist)
    - ii. Post-Test Communication
4. Timeline for Messaging (checklist)
5. Post-Test Activities
  - a. Data Collection and Analysis (checklist)
  - b. Reporting (checklist)
6. Appendix 1 - WEA Messages
  - a. English 90-character WEA
  - b. English 360-character WEA
  - c. Spanish 90-character WEA
  - d. Spanish 360-character WEA
7. Appendix 2 - Recipient Survey
  - a. This survey was translated into Arabic, Chinese, Laotian, Japanese, Romanian, Somali, Spanish, Ukrainian, and Vietnamese.
8. Appendix 3 - Proposed FAQ
9. Appendix 4 - Examples of Social Media Posts and Press Releases



## Appendix 2 – Frequently Asked Questions

Multnomah County Emergency Management published the following Frequently Asked Questions page from July 14, 2025, at <https://multco.us/info/wireless-emergency-alerts-frequently-asked-questions> and it was also placed prominently at the top of its main page at <https://multco.us/departments/office-emergency-management>.

### Wireless Emergency Alerts Frequently Asked Questions

On August 14, 2025, at 2:00 p.m., Multnomah County will conduct a live test of the Wireless Emergency Alert system. Here are some commonly asked questions regarding these emergency notifications.

On this page

- [Questions about the test](#)
- [Questions about WEA notifications](#)
- [Questions about PublicAlerts](#)

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Multnomah County's Office of Emergency Management is planning a test of the Wireless Emergency Alert (WEA) system to all mobile phone devices capable of receiving such an alert. Visit the [Federal Emergency Management Agency's page on WEAs](#) for more information on how this system works or [Public Alerts](#) for additional details on alerting systems in the region.

### Questions about the test

#### When is the test occurring?

Thursday, August 14, 2025, between 2:00 and 2:30 p.m.

#### What should I do when I get the test alert?

You do not need to do anything. Please **DO NOT** call 911, 211, or 311.

However, we would like to hear from you about your experience. When you receive the WEA test message, it will include a link to a [survey](#) to share your experiences on the test message. (Click on the globe icon at the top of the survey for Spanish, Arabic, Chinese, Laotian, Japanese, Romanian, Russian, Somali, Ukrainian, and Vietnamese.) The survey closes on Friday, August 15, 2025.

#### What will the test message say?

For most smart phones, the message will read, "TEST - Multnomah County is testing its Wireless Emergency Alert system. This message confirms that your phone can receive emergency alerts. In an actual emergency, this system would be used to share potentially

life-saving information. NO ACTION is required. Visit <https://arcg.is/0mDLjG> to complete a survey regarding this TEST. END OF TEST.”

Certain phones with only 3G or limited network access will receive a shorter message that reads, “TEST - Multnomah County is testing its Wireless Emergency Alerts. NO ACTION is required.”

### **What if a real-world event happens on the test day?**

If widespread severe weather, wildfire, or other significant event happens on August 14 where we or neighboring counties will be using the Wireless Emergency Alert system to send emergency messages, we will cancel this test.

### **Why is Multnomah County doing this test now?**

Recent floods in Texas and wildfires in Los Angeles have shown how important emergency alerts are. Timely alerting can save lives. We want to test our public alert and warning systems to make sure they work well. This helps us find ways to make them better. It's important for public safety workers to know they have good ways to tell people about dangers during an emergency. Testing the WEA system helps us keep using it, learn how to use it better, and make it even better.

This will be the first live test of the WEA system in Multnomah County of this size—over 800,000 residents and visitors will be in the test area.

### **Why did I receive the alert when I wasn't in Multnomah County?**

We know that cell phones or other mobile devices outside, but close to, Multnomah County will also get the WEA alert. This is because the technology uses cell towers. In areas that are more rural, the alert might reach up to five miles outside the county. In busy city areas, it will reach less, maybe up to one mile. It's important that you tell us when and where you got the WEA message. This helps us give feedback to the wireless companies.

### **Why did I receive the alert later than others or not at all?**

There are many reasons a person may not receive the WEA test:

1. Your phone may not be capable of receiving WEAs. Please check with your wireless carrier to see if your phone is able to receive WEA messages.
2. If you are in the middle of a call when the message is sent, you may not receive it.
3. If you have apps running, you may not hear the tone.
4. Not all cell phone companies send out emergency alerts. Some might send them in certain areas or to certain phones, while others don't send them at all. Even if your phone can get these alerts, you won't receive them if your cell phone company doesn't offer the service in your area, or if you're using another

company's network that doesn't support the alerts. You should ask your cell phone company if they send out Wireless Emergency Alerts (WEA) and where.

5. Sometimes people turn off the emergency alerts on their cell phones. Here's how to check if yours are on or off, depending on what kind of phone you have:

For most iPhones:

1. Open the "Settings" app.
2. Tap on "Notifications" and scroll to the very bottom.
3. Look for "Government Alerts." You'll see options like "AMBER Alerts", "Emergency Alerts", and "Public Safety Alerts". Make sure these are turned "on."

For most Android phones:

1. Go to "Settings."
2. Tap on "Safety and Emergency"
3. Once you open this, open "Wireless Emergency Alerts" and make sure "Allow alerts" is selected along with "Extreme threats", "Severe threats", and "Public safety messages".

*Keep in mind that how you find these settings might be a little different on your phone.*

**If I have "Test Alerts" (iPhone) or "State and local test" (Android) turned off in my phone's alert notification settings, will I still receive this test message?**

Yes. When we send this live WEA test, we'll be using a "live" code, which means it will be processed as any WEA message we would send out in an actual emergency. Additionally, we are required to regularly send test messages to IPAWS using a separate "test" code. If you have this turned on, your phone may also receive those messages we send using the test code.

**Who can I contact to find out more information about the WEA test?**

You can email Multnomah County Emergency Management at [emergency.management@multco.us](mailto:emergency.management@multco.us)

## **Questions about WEA notifications**

**What is a Wireless Emergency Alert or WEA?**

WEAs are part of a national public safety alert system that allows people who use cell phones and other mobile devices to receive text messages about threats to safety in their area.

**How will I know the difference between WEA and a regular text message?**

## *Appendix 2 – Frequently Asked Questions*

WEA includes a special tone (some describe it as quite loud) and a vibration, both repeated twice. WEAs look like a text message, but are actually a "notification" on your phone. They are designed to grab your attention.

### **Do I need to sign up for WEA alerts?**

No, you do not need to sign up to receive a WEA notice. You should receive the alert if your WEA-enabled cell phone or mobile device is in the target location. Please check your phone settings to make sure you have enabled your phone to receive alerts. (See below for how to do that.)

### **Will I be charged for receiving WEA messages?**

No. This service is free.

### **Does WEA know where I am? Is it tracking me?**

No. A WEA message is sent from cell towers in an area to cell phones nearby. Every phone that can get WEA messages and is close enough will get the message, similar to emergency weather alerts you see on TV. WEA, like a TV station, doesn't know who is watching.

### **Will I receive WEAs on a prepaid phone?**

Probably. The FCC says people with prepaid phones can get WEAs if their phone provider is part of the WEA program and they have a WEA-ready phone. Check with your phone provider to see if your phone can receive WEAs.

### **How will I receive alerts if I don't have a WEA-enabled device?**

WEA is one way emergency responders can tell you about an emergency. We can also use NOAA Weather Radio, the Emergency Alert System on TV and radio, and our [PublicAlerts](#) system, which you can choose to sign up for.

### **Will my child's device receive a WEA?**

Yes. Children will also receive alerts on their WEA-enabled mobile devices. Parents and guardians should talk to their children about emergency alerts and staying safe in an emergency. A printable fact sheet about WEAs for children can be found [at Ready.gov](#).

### **I'm an international visitor to the area. Will my phone receive a WEA?**

Most major cell phones (like Apple, Samsung, and LG) get WEA alerts no matter where you bought them. If you're using a participating US wireless carrier while you are in the US, you should be able to receive WEAs, even if your phone was purchased outside the US.

### **Why was the WEA alert only sent in English and Spanish?**

For now, the WEA system only supports messages in English and Spanish.

Our local opt-in alerting system—[Multnomah County PublicAlerts](#)—has commonly used alert messages translated into 10 different languages: Arabic, Chinese, Japanese, Laotian, Romanian, Russian, Somali, Spanish, Ukrainian, and Vietnamese.

### **What types of alerts are sent through WEA?**

There are three types of messages sent through WEA: extreme weather and other threatening emergencies in an area, child abduction (AMBER), and Presidential alerts during a national emergency.

### **How does WEA work?**

Authorized government groups, like those at the national, state, or local level, can send important safety messages using WEA. These messages are for emergencies like telling people to leave an area or find shelter because of things like wildfires, a threat from terrorists, or a chemical leak. These alerts come from trusted public safety workers and are sent through a system called IPAWS, which is run by FEMA. Wireless companies then send these alerts to cell phones and other mobile devices that can get them in the area where the emergency is happening.

### **Who receives a WEA alert?**

We create a map around the exact spot we are trying to reach. Everyone with a WEA-enabled phone in that area will get the alert, even if they're just visiting or passing through. So, if someone from Seattle or Boston is visiting the area that is targeted for the WEA and has their phone on, they'll get the alert too.

We know that cell phones or other mobile devices outside, but close to, the area targeted for the WEA will also get the alert. This is because the technology uses cell towers. In areas that are more rural, the alert might reach up to five miles outside the alert zone. In busy city areas, it will reach less, maybe up to one mile.

Officials take sending out a WEA very seriously. So, if you get a WEA, do what it says to protect yourself and immediately check local news for more information. During a real emergency, officials promise to give important information that can save lives, and we want to reach everyone. We want to make sure the public is safe, which means we will share as much information as we can in as many ways as we can.

## **Questions about PublicAlerts**

### **How are WEAs different from PublicAlerts?**

WEAs are part of a national system called the Integrated Public Alert and Warning System. You don't need to sign up for WEA messages. If your cell phone can get WEA messages, it will automatically receive an alert with a loud tone and vibration if you are in or passing through the specific area where the message was sent. In the Portland metro area, we only use WEAs for very serious emergencies or crises where it's important to reach everyone in the danger area, even if they are just passing through.

## *Appendix 2 – Frequently Asked Questions*

[PublicAlerts](#) is a system that sends alerts to people in the Portland metro area who have registered their contact information. Outside of that area, it's called [OR-Alerts](#). You can sign up with your cell phone, home phone, and email. You can register up to 5 different addresses in each county. You get to choose what kinds of alerts you want, what language you want them in, and how you want to get them (by phone call, text, or email). These messages don't have any special sounds or vibrations.

These messages are sent to the specific addresses you sign up for (you can sign up for up to 5 with Public Alerts). So, no matter where you are, if an alert is sent to an address you registered, you will get it. You can find out more about Public Alerts (alerts you choose to receive) [here](#).

### **How can I find out more information about WEA or PublicAlerts?**

To learn more about WEAs, visit [Ready.gov](#). To learn more about all of the alerting systems we use in the Portland Metro Region, visit [PublicAlerts.org](#).

## Appendix 3 – Direct Communications

Multnomah County Emergency Management sent direct communications to the entities listed below on July 17, July 24, July 30, and August 7. The purpose of these direct communications was to provide information about the test alert, acknowledge potential impacts to their work or clients, promote the Frequently Asked Questions page, provide posters for printing and posting in their offices and public spaces, and offer multiple “office hours” for anyone with questions, and a means for communicating any issues with us. These direct communications also asked recipients to broadly promulgate relevant information across their organizations and other with partners to ensure the broadest possible consumption.

### Entities that received direct communications

City of Portland

- 311
- Bureau of Emergency Communications (911 dispatch center)
- Bureau of Emergency Management
- Bureau of Transportation
- Fire and Rescue
- Parks and Recreation
- Police Bureau

City of Fairview

City of Gresham

City of Maywood Park

City of Troutdale

City of Wood Village

Multnomah County

- Department of Community Services
- Department of County Assets
- Department of County Human Services
- Department of County Management
- Health Department
- Homeless Services Department
- Libraries
- Sheriff’s Office

### *Appendix 3 – Direct Communications*

#### Other local or regional bodies in Multnomah County

- 211
- Corbett Safety and Information Group
- Fire Defense Board (and all fire districts, including Corbett, Gresham, Sauvie Island, Scappoose, and Tualatin Valley Fire and Rescue)
- Home Forward
- Metro Government
- Port of Portland
- TriMet
- Urban Flood Safety and Water Quality District

#### Community outreach

- Community Organizations Active in Disasters
- Community Communicators / Liaison Group
- Citizen Corps Working Group

#### Regional 911 dispatch centers

- Clackamas Communications
- Columbia 911 Communications
- Lake Oswego Communications
- Washington County Consolidated Communications Agency

#### Hospitals

- Adventist Health
- Cedar Hills
- Legacy Health
- Oregon Health and Science University Hospital
- Vibra Specialty Hospital
- Providence Hospital
- Shriners Children’s Hospital
- Veterans Administration Medical Center

#### School districts

- Centennial School District
- Corbett School District
- David Douglas School District
- Gresham School District
- Multnomah Education Service District
- Parkrose School District
- Portland Public Schools

- Reynolds School District
- Riverdale School District

#### Higher education institutions

- Portland State University
- Mount Hood Community College
- Portland Community College
- University of Portland
- Reed University
- Multnomah University
- Lewis and Clark University
- Warner Pacific University

#### Regional emergency management agencies

- Clackamas County Disaster Management
- Clark Regional Emergency Services Agency (including 911 dispatch)
- Hood River Emergency Management
- Washington County Emergency Management

#### State and Federal agencies with offices or representation in Multnomah County

- Federal Bureau of Investigation
- National Weather Service
- Oregon Department of Emergency Management
- Oregon Department of Justice District Court
- Oregon Department of Transportation
- Oregon Health Authority (including the Health Preparedness Organization)
- Oregon National Guard
- United States Army Corps of Engineers
- United States Coast Guard
- Veteran's Health Authority

### **Example communication before the test**

Hello!

Multnomah County will be conducting a countywide live test of the Wireless Emergency Alert (WEA) system on **August 14 at 2:00 p.m.** WEA is a national public safety system operated by FEMA's Integrated Public Alert and Warning System office that allows people who use cell phones and other mobile devices to receive text messages about threats to safety in their area. There are three types of messages commonly sent through WEA: extreme weather and other threatening emergencies in an area, child abduction (AMBER), and Presidential alerts during a national emergency.

### *Appendix 3 – Direct Communications*

This is the first time the County will be conducting a live test of this size. We anticipate this test alert will reach about one million residents and visitors in the County.

It is important to test our public alert and warning systems to make sure they work well. This helps us find ways to make them better. It's important for public safety workers to know they have good ways to tell people about dangers during an emergency. Testing the WEA system helps us keep using it, learn how to use it better, and make it even better.

The message, which will be sent in English and in Spanish, will read, "*TEST - Multnomah County is testing its Wireless Emergency Alert system. This message confirms that your phone can receive emergency alerts. In an actual emergency, this system would be used to share potentially life-saving information. NO ACTION is required. Visit [link to survey] to complete a survey regarding this TEST. END OF TEST*"

(The Spanish version of the message will read, "*PRUEBA del sistema de alertas de emergencia por celular del Condado de Multnomah. Este mensaje confirma que su celular puede recibir alertas. En emergencias verdaderas recibira datos vitales por este sistema. MEDIDAS NO requeridas. Participe en una encuesta sobre esta PRUEBA en [link to survey]. FIN DE LA PRUEBA*")

We realize that this test may impact your organization, and so we want to provide you with ample opportunity to prepare your organization accordingly. If you are a call center (e.g., 911 Dispatch, 211, 311, fire department, law enforcement agency, etc.)—despite our best efforts to publicly discourage people from doing so—you may receive calls, texts, or emails from people who receive the test alert notification.

If you are an organization that engages with the public or certain groups of people (e.g., public transportation, parks and recreation, schools, hospitals, clinics, courts) you may want to consider special messaging that you want to conduct for your clients, especially on the day of the test and the moments before the test occurs. Some key points we think will be helpful for you to consider as you prepare your clients include:

- Emphasize that this is a scheduled, system-wide test of emergency notifications. No action is required from the public.
- Remind them of the specific date and time often.
- If it's relevant to your group, note that the test will reach beyond Multnomah County due to cell tower locations, which are used to transmit the test message.
- Emphasize that testing helps ensure that the public can be effectively notified in the event of an actual emergency. Testing also helps identify areas for improvement and build confidence in local emergency management officials.
- Describe the test as a combination of a loud tone and vibration along with a text message. (See [this YouTube video](#) for an approximation of the sound.)
- See [Ready.gov](#) for more information on WEAs

We have published a [Frequently Asked Questions](#) page on our website, which we hope you find useful as you consider how your organization will prepare your staff and clients for this test. I'll also be holding office hours on the following dates and times if you have additional questions on how to prepare your organization and the clients you serve for this test:

- Friday, July 25, 2:00-3:00 p.m.
- Wednesday, July 30, 2:00-3:00 p.m.
- Monday, August 4, 2:00-3:00 p.m.

To join for any of these opportunities:

[Zoom link, meeting ID, and passcode]

Beginning one to two weeks prior to the test, our Communications Office will launch a comprehensive public information campaign across television, print, and social media. In addition to promoting the information in our [FAQ](#), we'll be promulgating the core message that the upcoming Wireless Emergency Alert (WEA) test is a scheduled exercise to assess the effectiveness of the emergency notification system. This is a TEST and does not require any action from the public. Please DO NOT call 9-1-1 during the test, except for life threatening emergencies. Additionally, we will be communicating directly with community-based organizations that work with underserved communities and culturally specific groups to help ensure that our pre-test messaging reaches as many people as possible.

If you're not able to make any of these times and you still would like to meet with me, please use the "book a meeting with me" link in my signature below to schedule a time to meet.

### **Example communication after the test**

[Sent August 15, 2025]

Hello!

I wanted to personally express my appreciation for your cooperation in preparing our communities leading up to yesterday's live test of the Wireless Emergency Alert system.

We received about 50 emails from individuals in Multnomah County who reported that they did not receive the notification on their cellular device, and so we've created a survey just for those folks in Multnomah County who should have received the test but did not.

[\[link to survey for people who did not receive the WEA in Multnomah county\]](#)

I would be grateful if you could share this link broadly to colleagues, clients, or constituents who were in Multnomah County yesterday afternoon and encourage those who did not receive the WEA to complete the survey. We'll be posting this on our social

### *Appendix 3 – Direct Communications*

media pages, as well, but want to hear from as many people as possible who did not receive the alert but should have.

I will be sharing a full report about the test at some point soon, but I wanted to share with you some preliminary results from the survey link that was included with the notification.

We received a total of 7,622 responses. Of those, 90% reported that they were in Multnomah County. For our neighboring counties:

- Clackamas (OR) 2.2%
- Washington (OR) 1.86%
- Columbia (OR) 0.29%
- Clark (WA) 0.81%
- Skamania (WA) 0.07%
- Cowlitz (WA) 0.04%
- Someplace else in Oregon 3.32%\*
- Someplace else in Washington 21 0.28%\*

\* We did not ask respondents who selected "someplace else" to identify where they were. This could include visitors or other respondents who did not know what county they were in.

Two-thirds of respondents reported that their cell phone operating system is iOS (e.g., iPhone) while nearly one-third reported their phone uses an Android system.

Cell phone carriers were almost evenly divided across T-Mobile, Verizon, AT&T, with a quarter of respondents saying their carrier was something else not listed.

Over 81% of respondents self-reported as residents of Multnomah County, while nearly 9% reported themselves as visitors to the county. Just over 6% of respondents said they were neither a visitor nor a resident of Multnomah County.

Thank you again for your cooperation! Please do share the survey link above with anyone you know who was in Multnomah County yesterday afternoon between 2:00 and 2:30 p.m. and did NOT receive the WEA test notification.

## Appendix 4 – Post-test Survey

This survey was also translated into Arabic, Chinese, Laotian, Japanese, Romanian, Somali, Spanish, Ukrainian, and Vietnamese.

Multnomah County is testing our Wireless Emergency Alert system to help improve our capability to reach people in the county in a life-safety emergency. We'd like to know how you received our message and where you were when you received it. You don't have to answer any question you don't want to. We don't ask for your name or anything that would let us know who you are.

The Wireless Emergency Alert system is part of FEMA's Integrated Public Alert and Warning System. It sends text messages to cell phones to let you know about a disaster and actions you should take to save your life. For more info on IPAWS please go here: [Integrated Public Alert & Warning System | FEMA.gov](https://www.fema.gov/ipaws).

It's our intent that the test alert only goes to people in Multnomah County, but we know that people outside Multnomah County also receive the test. Answering the questions below will help us work with FEMA and cell phone services to fix this. If you have more feedback, please email [emergency.management@multco.us](mailto:emergency.management@multco.us)

Thank you for helping us make the Multnomah County alert system better.

1. Which county were you in when you received this message?
  - a. Multnomah (OR)
  - b. Clackamas (OR)
  - c. Washington (OR)
  - d. Columbia (OR)
  - e. Clark (WA)
  - f. Skamania (WA)
  - g. Cowlitz (WA)
  - h. Someplace else in Oregon
  - i. Someplace else in Washington
2. What kind of operating system does your cell phone have?
  - a. iOS (e.g., iPhone)
  - b. Android (e.g., Samsung, Sony, Nokia, Motorola, etc.)
  - c. Something else
3. What is the make and model of your cell phone? (e.g., Samsung S25)
  - a. [Freeform]
4. What is your cell phone carrier?
  - a. Verizon

*Appendix 4 – Post-test Survey*

- b. T-Mobile
  - c. AT&T
  - d. US Mobile
  - e. Something else
5. Which of the following best describes you?
- a. Resident of Multnomah County
  - b. Visitor to Multnomah County
  - c. Neither a resident of nor a visitor to Multnomah County

## Appendix 5 – Non-recipient Survey

If you did NOT get the WEA notification....

This survey is ONLY for people who were in Multnomah County on August 14 between 2:00 and 2:30 p.m. and did NOT receive the Wireless Emergency Alert test notification that was sent out. We would like to learn more about where you were, what your phone model is, your phone's emergency notification settings, and who your carrier is to help us troubleshoot this.

Wireless Emergency Alerts are a critical tool for us to communicate life-safety hazards and it's important to us that we reach as many people in the affected area as possible.

This survey is voluntary and you are not required to answer any question you do not want to. We will NOT collect any personal information, including your email or phone number. If you want to follow up with us, please email [emergency.management@multco.us](mailto:emergency.management@multco.us). (If you have already emailed us, rest assured that we've received it and intend to respond to you as soon as we can.)

1. Prior to this test alert, had you heard of Wireless Emergency Alerts?
  - a. Yes
  - b. No
  - c. I don't know
  
2. Do you have more than one cellular device that did not receive this test alert?  
*For this survey, the remaining questions will be about your primary cellular device that did NOT receive the alert, but we also want to know if you have multiple devices that did not receive the alert.*
  - a. Yes
  - b. No
  - c. I don't know
  
3. Please select one of the following locations within Multnomah County that is closest to where you were on August 4 between 2:00 and 2:30 p.m.
  - a. City of Fairview
  - b. City of Gresham
  - c. City of Maywood Park
  - d. City of Lake Oswego
  - e. City of Milwaukee
  - f. City of Portland
  - g. City of Troutdale
  - h. City of Wood Village
  - i. Burlington
  - j. Corbett

*Appendix 5 – Non-recipient Survey*

- k. Dodson
  - l. Dunthorpe
  - m. Folkenburg
  - n. Holbrook
  - o. Interlachen
  - p. Latourell
  - q. Linnton
  - r. Northwest Heights
  - s. Orient
  - t. Pleasant Home
  - u. Sauvie Island
  - v. Warrendale
  - w. West Haven-Sylvan
  - x. None of these
4. What kind of operating system does your primary cellular device have?  
*Most devices connected to a cellular network is capable of receiving Wireless Emergency Alerts, including cell phones, smart watches, tablets, and other devices.*
- a. iOS (e.g., iPhone)
  - b. Android (e.g., Samsung, Sony, Nokia, Google, Motorola, etc.)
  - c. Something else
  - d. I don't know
5. What is the brand and model of your primary cellular device that did not receive the notification?  
*For example, Samsung S25 or iPhone 14. Most devices connected to a cellular network are capable of receiving Wireless Emergency Alerts, including cell phones, smart watches, tablets, and other devices.*
- [Freeform answer]
6. What is your wireless carrier?
- a. Verizon
  - b. T-Mobile
  - c. AT&T
  - d. US Mobile
  - e. Cricket
  - f. Xfinity / Comcast
  - g. Lumen / CenturyLink
  - h. Qlink Wireless
  - i. Something else
7. What your primary cellular device turned on at the time of this test alert?

- a. Yes
  - b. No
  - c. I don't know
8. Were you using your primary cellular device (for example, on a call or checking email) at the time of this test alert?
- a. Yes
  - b. No
  - c. I don't know
9. Was your primary cellular device connected to wifi at the time of this test alert?
- a. Yes
  - b. No
  - c. I don't know
10. Is your primary cellular device opted out any of the following alerts? Please check all that apply. If you're not sure, please select "I don't know".
- a. AMBER alerts
  - b. Extreme threats
  - c. Severe threats
  - d. Public safety messages
  - e. State and local tests
  - f. Test alerts
  - g. I don't know
11. Are any of the following options turned on in the emergency notification settings of your primary cellular device? Please check all that apply. If you're not sure, please select "I don't know".
- a. Vibration
  - b. Alert reminder (e.g., every 2 minutes)
  - c. Always alert at full volume (i.e., ignore Do Not Disturb and other volume settings)
  - d. Always play sound (i.e., even if your phone is in Silent mode)
  - e. Speak alert message (i.e., use text-to-speech to speak messages)
  - f. Local awareness (i.e., your approximate location is used to improve the timeliness, accuracy, and reliability of the alerts you receive)
  - g. Do not disturb while driving
  - h. I don't know



## Appendix 6 – Media Coverage

This is not meant to be a comprehensive list of the media coverage, but rather what Multnomah County's Communications Office was able to track. Social media posts captured below only include those directly posted to official Multnomah County accounts. Posts made by others, including news outlets or on other social media platforms where the Multnomah County Communications Office does not maintain active accounts were not captured. All hyperlinks were live at the time of capture.

### Print and broadcast media coverage

The week of August 2 to 8:

[County Communications release](#): "NEWS RELEASE: Multnomah County test will light up cell phones at 2 p.m. Aug. 14 to test Emergency Alerts" quotes Emergency Management Director Chris Voss; references the Emergency Management Office and Multnomah County.

[OPB](#): "Multnomah County alert will ping up to 1 million cellphones" quotes Emergency Management Director Chris Voss; references Multnomah County.

[Oregonian](#): "Don't panic – it's just a test: county emergency alert will light up phones in Portland area next week" quotes Emergency Management Director Chris Voss; cites County officials; references Multnomah County.

[Portland Tribune](#): "Multnomah County to ping up to 1 million cellphones in alert test" quotes Emergency Management Director Chris Voss; references Multnomah County.

The week of August 9 to 15:

[Axios Portland](#): "Portlanders to receive emergency system test alert at 2pm Thursday" references Multnomah County.

[OPB](#): "Essential facts about emergency alerts in Oregon" references Multnomah County.

[Valley Times](#): "Multnomah County emergency alert test Thursday may 'overspray' into Washington County" quotes Emergency Management Director Chris Voss; references Multnomah County.

[KATU](#): "Multnomah County alert system test scheduled for Thursday afternoon" quotes Emergency Management Operations Division Chief Richard Higgins and Emergency Management Director Chris Voss; references Multnomah County.

[KGW](#): "Don't panic: Emergency alert test will sound on Portland-area phones Thursday" quotes Emergency Management Director Chris Voss; references Multnomah County.

## *Appendix 6 – Media Coverage*

**KOIN:** “Emergency alert set for Thursday in Multnomah County. Don’t worry, it’s a test” quotes Emergency Management Director Chris Voss and Emergency Management Operations Division Chief Richard Higgins; references Multnomah County.

**KPTV:** “Multnomah County to test emergency alert system Thursday” quotes Emergency Management Director Chris Voss; references Multnomah County.

**1190 KEX:** “Wireless Emergency Alert Test Planned” references Multnomah County.

**KXL:** “REMINDER: Multnomah County To Test Emergency Cell Phone Alert System At 2 p.m.” references Multnomah County.

The week of August 16 to 22:

**KOIN:** “What to do if you did not receive Thursday’s Multnomah County emergency alert test” cites Multnomah County.

### **Social media posts by Multnomah County Communications Office**

#### **Facebook (English)**

@MultCo

- August 5:  
<https://www.facebook.com/share/p/15sUnkiuSt/>
- August 7:  
<https://www.facebook.com/share/p/1GvWTn1BpN/>
- August 13:  
<https://www.facebook.com/share/p/16g69Waviu/>  
<https://www.facebook.com/share/p/1EmVxoUGym/> (Spanish)
- August 14:  
<https://www.facebook.com/share/p/19FibJrJDW/>
- August 15:  
<https://www.facebook.com/share/p/16dAQDCNvK/>

#### **Facebook (Spanish)**

@CondadodeMultnomah

- August 7:  
<https://www.facebook.com/share/p/1AzLPQBe4D/>
- August 13:  
<https://www.facebook.com/share/p/1As5uzNGiN/>

- August 14:  
<https://www.facebook.com/share/p/1ZQfg9o4Dx/>
- August 15:  
<https://www.facebook.com/share/p/1D8djnJ8mG/>

## X

@multco

- August 5:  
<https://x.com/multco/status/1952870416663625869?t=ZbDchIkHt8wTuciiw1b7xA&s=19>  
<https://x.com/multco/status/1952870418005803407?t=G1u3mjducuYz4nt790qzfA&s=19>
- August 7:  
<https://x.com/multco/status/1953467479772254407?t=4Xc7VagS0qCKa9Wfe6nOPg&s=19>  
<https://x.com/multco/status/1953467481483567568?t=bLs5wKzCSugld6KLLaXlGw&s=19>
- August 13:  
<https://x.com/multco/status/1955619407990047128?t=Lcl0OohgUcmE3kEAh-ElmQ&s=19>  
<https://x.com/multco/status/1955619410867278300?t=r7YNp-zSpyOHL2UDGk0BVg&s=19>
- August 14:  
<https://x.com/multco/status/1956016703885992291?t=1FD3l6yxREA4dwwWi7jwxw&s=19>  
[https://x.com/multco/status/1956016705672814839?t=wnfn2EVjJ6jilE4hAYM\\_cw&s=19](https://x.com/multco/status/1956016705672814839?t=wnfn2EVjJ6jilE4hAYM_cw&s=19)
- August 15:  
<https://x.com/multco/status/1956499450660331935?t=h7i4xcSuKHKi9ugqIJddQO&s=19>

## Bluesky

@multco.bsky.social

- August 5:  
<https://bsky.app/profile/multco.bsky.social/post/3lvswuyhsdk27>

## Appendix 6 – Media Coverage

<https://bsky.app/profile/multco.bsky.social/post/3lvswuzuzm227>

- August 13:

<https://bsky.app/profile/multco.bsky.social/post/3lwbvelflqc2j>

<https://bsky.app/profile/multco.bsky.social/post/3lwbveppuk22j>

- August 14:

<https://bsky.app/profile/multco.bsky.social/post/3lweofn7pdk2u>

<https://bsky.app/profile/multco.bsky.social/post/3lweofogngk2u>

- August 15:

<https://bsky.app/profile/multco.bsky.social/post/3lwhz45v6rk2d>

## Instagram

@multnomahcounty

- August 13:

<https://www.instagram.com/p/DNTANBVVk5F/?igsh=djE0Z3MzM2JkcGE0>

- August 14:

<https://www.instagram.com/p/DNV2ACUxsKe/?igsh=MWo2eHJIOW0wbnpmaA=>

≡

- August 15:

<https://www.instagram.com/p/DNZWdZqR59n/?igsh=MWk1cWo2eW9hanUwag=>

≡

## Press releases



**For immediate release:** Monday Aug. 4, 2025

[Attached to this communication was a “Communications Tool Kit”, which included a printable poster, proposed social media text, and graphic images for website banners, social media (English and Spanish), and websites (English and Spanish.) If you would like to see the actual communications tool kit, please email [emergency.management@multco.us](mailto:emergency.management@multco.us)]

**Media contact:**

Julie Sullivan-Springhetti, [pressoffice@multco.us](mailto:pressoffice@multco.us)

This release is online here.

*Reporters and editors: For planning purposes, Emergency Management Director Chris Voss is available for in-studio and in-person interviews this week or next. Please email the press office to arrange.*

**MEDIA ADVISORY: Multnomah County test will light up cell phones at 2 p.m. Aug. 14 to test Emergency Alerts**

*The alert will reach nearly 1 million County residents and visitors to assure the system works; no action is needed by the public*

**Multnomah County, Ore. (Aug. 4, 2025)** – In preparation for an actual emergency, Multnomah County will issue a rare, but important, test of its Wireless Emergency Alert (WEA) system on Thursday, Aug. 14, at 2 p.m.

Multnomah County Emergency Management will send an alert to the cell phones of up to 1 million residents and visitors. Recipients of the alert will hear a high-pitched tone, their phone will vibrate twice, accompanied by a text message in English and Spanish.

**No action is required of people who receive this alert.** Please do not call 911, 211 or 311. The test is only to help emergency planners confirm the system will work during an actual emergency and to identify what can be improved. Everyone will receive a link to a survey if they care to weigh in further.

**Here is what the notification will say:**

*"TEST - Multnomah County is testing its Wireless Emergency Alert system. This message confirms that your phone can receive emergency alerts. In an actual emergency, this system would be used to share potentially life-saving information. NO ACTION is required. Visit <https://arcg.is/0mDLjG> to complete a survey regarding this TEST. END OF TEST"*

*"PRUEBA del sistema de alertas de emergencia por celular del Condado de Multnomah. Este mensaje confirma que su celular puede recibir alertas. En emergencias verdaderas recibira datos vitales por este sistema. MEDIDAS NO requeridas. Participe en una encuesta sobre esta PRUEBA en <https://arcg.is/0mDLjG>. FIN DE LA PRUEBA"*

Certain phones with only 3G or limited network access will receive a shorter message that reads, "TEST - Multnomah County is testing its Wireless Emergency Alerts. NO ACTION is required."

### **Why is the County sending a test alert?**

The scheduled test comes after flash floods in Texas, as well as fires in California and Hawaii, highlighted the need for rapid, widespread notifications to save lives.

"The best time to find out if this alert system works is before an actual emergency," said Emergency Management Director Chris Voss. "We need to know if it works as intended and for that, we need your help."

Cell phone alerts are part of the nationwide Federal Emergency Management Administration's (FEMA) integrated public alert and warning system, designed to quickly notify people of threats to their safety. Messages commonly sent through the system include warnings about emergency weather and child abductions (AMBER alerts). The system can also be used to issue Presidential alerts in the event of a national emergency.

During the Multnomah County test, some people in Washington, Clackamas and Clark counties may also receive the alert because of potential "overspray" due to cell phone tower locations. The County has already notified local cities, emergency responders, school districts, universities, and regional, state and federal agencies. The County is asking those partners to be aware of the upcoming test and to help prepare their clients.

### **Will everyone get the alert?**

People whose cell phones are off, on "airplane mode" or connected to a Virtual Private Network will not receive an alert. Others may not because they have opted out of receiving alerts. [FEMA offers these directions](#) for checking to see if your phone is enabled to receive an alert.

Because any child with a cell phone will also receive an alert, the test is also an opportunity to talk to kids about what to do in an emergency. A printable fact sheet for children about WEAs, as well as more information on Wireless Emergency Alerts, can be found [at Ready.gov](#).

Watch [this YouTube video](#) for an approximation of the sound.

### **How is the County sharing this information?**

The County has notified officials from the cities of Portland, Gresham, Fairview, Maywood Park and Wood Village, as well as law enforcement agencies, fire departments,

information lines, regional governments, school districts, colleges and universities, hospitals, community-based organizations, state and federal agencies with offices in Multnomah County, and regional Emergency Management partners in Columbia, Washington, Clackamas and Hood River counties. County officials are asking everyone to share that the test is coming and that no action is needed on the part of the public.

County Emergency Management has also posted a [Wireless Alert Frequently Asked Questions](#) page with more information.

**What if a real emergency is happening?**

In the event of an actual emergency on Aug. 14, such as a wildfire, Multnomah County will reschedule the test.

###



[Sent August 12, 2025]

Dear Partners,

On Thursday, Aug. 14 at 2 p.m. Multnomah County will issue a rare, but important, test of its Wireless Emergency Alert (WEA) system. We are asking you to consider sharing the social media posts below to help prepare our community.

**What is happening:** Multnomah County Emergency Management will send an alert to the cell phones of up to 1 million residents and visitors. Recipients of the alert will hear a high-pitched tone, their phone will vibrate twice, accompanied by a text message in English and Spanish. [Here is our Aug. 5, 2025 news release.](#)

**No action is required of people who receive this alert.** Please do not call 911, 211 or 311. The test is only to help emergency planners confirm the system will work during an actual emergency and to identify what can be improved. Everyone will receive a link to a survey if they care to weigh in further.

**Who will receive the alert?** People in Multnomah County, but also some people in Clackamas, Columbia, Hood River and Washington counties in Oregon, and in Cowlitz, Clark and Skamania counties in Washington, may also receive the alert because of potential "overspray" due to cell phone tower locations.

For that reason, we are asking partners like you to be aware of the upcoming test and to help prepare your communities.

***PLEASE CONSIDER USING AND SHARING THESE SUGGESTED POSTS TO HELP PREPARE OUR COMMUNITY FOR THE AUG. 14 WEA TEST!***

**Timeline for Messaging:**

- **One day before test (Wednesday, Aug. 13, 2025):** Reminder message to the public with the two posts attached.
- **Test day (Thursday, Aug. 14, 2025):** Final reminder of the test, followed by test alert broadcast. Please share from our channels.
- **Post-test (between Friday, Aug. 15 and Monday, Aug. 18, 2025):** A follow-up message thanking the public and offering an opportunity for feedback.

If you could reshare from Multnomah County channels we'd sure appreciate it.

<https://www.facebook.com/MultCo>

<https://www.instagram.com/multnomahcounty/>

<https://bsky.app/profile/multco.bsky.social> @multco.bsky.social

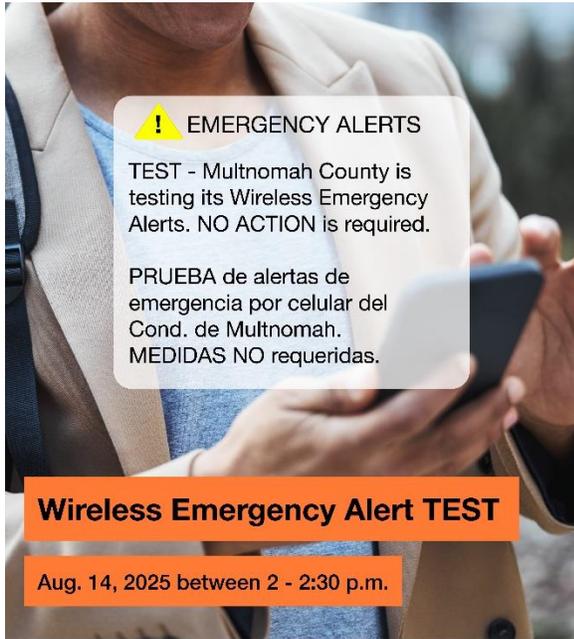
<https://x.com/multco>

Want more info? Please check out our FAQ page: [multco.us/em](https://multco.us/em)

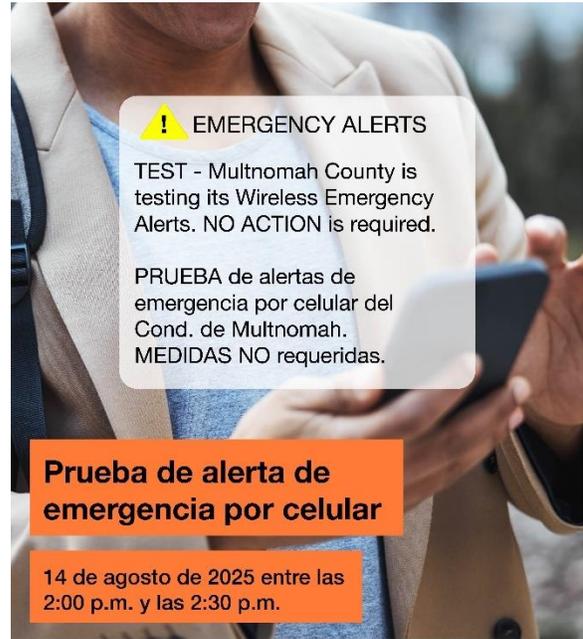
Thank you in advance!

Julie and the Multnomah County Comms Team

[Attachments:]



multco.us



multco.us

###



## Appendix 7 – FEMA IPAWS TSS OR Multnomah County Alert Review Report

On August 14, 2025, the IPAWS Technical Support Services (TSS) were onsite with Multnomah County staff conducting an emergency communications workshop with a coordinated Live Wireless Emergency Alert (WEA) test. The WEA alert was successfully processed by IPAWS-OPEN at 2:00pm PST.

### Observed On-Site

- Workshop participants with Xfinity cell service did not receive the WEA
- Workshop participants with the following cell carriers and phone models received the WEA at least a minute or more later than other carriers:
  - AT&T/First Net (iPhone)
  - T-Mobile (Android)
- Multnomah’s Live WEA Test Survey has received a total of 7,868 responses
- Feedback and concern received:
  - WEA would disappear from phone screens when touched and are irretrievable once they disappear

### FEMA IPAWS Findings

- The alert was successfully processed through IPAWS-OPEN with positive status codes for IPAWS, CAP, and WEA.
- The CAP v1.2 compliant alerts were well formed and contained no errors or even minor issues.
- IPAWS-OPEN successfully received and disseminated the alert to WEA
  - Processing time: Alert - 0.003 seconds; Cancel – 0.004 seconds
- The alert included a valid polygon within the bounds of less than 100 nodes and recommended four decimal points.

The following alert details are captured below:

Message Identifier	2117454847377110
Sender Name/COG ID	OR Multnomah County Office of Emergency Management/201377
IPAWS Pathways	WEA
Event code	LAE- Local Area Emergency

Appendix 6 – Media Coverage

Urgency	IMMEDIATE																																			
Severity	EXTREME																																			
Certainty	OBSERVED																																			
Alert Headline	Live WEA Test																																			
WEA Content	<p><b>90 Character:</b> TEST - Multnomah County is testing its Wireless Emergency Alerts. NO ACTION is required.</p> <p><b>360 Character:</b> TEST - Multnomah County is testing its Wireless Emergency Alert system. This message confirms that your phone can receive emergency alerts. In an actual emergency, this system would be used to share potentially life-saving information. NO ACTION is required. Visit <a href="https://arcg.is/0mDLjG">https://arcg.is/0mDLjG</a> to complete a survey regarding this TEST. END OF TEST</p>																																			
Area Description	Multnomah County																																			
Polygon																																				
Alert Status Codes <sup>10</sup>	<table border="1"> <tbody> <tr> <td>CAPEXCH</td> <td>200</td> <td>Ack</td> <td>-</td> <td>"2025-08-14T21:00:31.517Z"</td> </tr> <tr> <td>CAPEXCH</td> <td>202</td> <td>alert-signature-is-valid</td> <td>-</td> <td>"2025-08-14T21:00:31.433Z"</td> </tr> <tr> <td>IPAWS</td> <td>300</td> <td>Ack</td> <td>-</td> <td>"2025-08-14T21:00:31.545Z"</td> </tr> <tr> <td>NWEM</td> <td>401</td> <td>message-not-dissemi...</td> <td>-</td> <td>"2025-08-14T21:00:32.348Z"</td> </tr> <tr> <td>EAS</td> <td>501</td> <td>message-not-dissemi...</td> <td>-</td> <td>"2025-08-14T21:00:32.340Z"</td> </tr> <tr> <td>CMAS</td> <td>600</td> <td>Ack</td> <td>-</td> <td>"2025-08-14T21:00:32.365Z"</td> </tr> <tr> <td>PUBLIC</td> <td>800</td> <td>Ack</td> <td>-</td> <td>"2025-08-14T21:00:32.355Z"</td> </tr> </tbody> </table>	CAPEXCH	200	Ack	-	"2025-08-14T21:00:31.517Z"	CAPEXCH	202	alert-signature-is-valid	-	"2025-08-14T21:00:31.433Z"	IPAWS	300	Ack	-	"2025-08-14T21:00:31.545Z"	NWEM	401	message-not-dissemi...	-	"2025-08-14T21:00:32.348Z"	EAS	501	message-not-dissemi...	-	"2025-08-14T21:00:32.340Z"	CMAS	600	Ack	-	"2025-08-14T21:00:32.365Z"	PUBLIC	800	Ack	-	"2025-08-14T21:00:32.355Z"
CAPEXCH	200	Ack	-	"2025-08-14T21:00:31.517Z"																																
CAPEXCH	202	alert-signature-is-valid	-	"2025-08-14T21:00:31.433Z"																																
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PUBLIC	800	Ack	-	"2025-08-14T21:00:32.355Z"																																

<sup>10</sup> Times are "Zulu Time" or Coordinated Universal Time/Greenwich Mean Time.

Multnomah County Live WEA Test Initial Findings Report – August 2025

	ATT Primary -9	10	Ack	161.214.48.106	"2025-08-14T21:00:39.717Z"
	ATT Secondary-101	10	Ack	161.214.48.107	"2025-08-14T21:00:40.986Z"
	CellOneAz1-423	10	Ack	161.214.48.106	"2025-08-14T21:00:41.557Z"
	CellOneAz-403	10	Ack	161.214.48.107	"2025-08-14T21:00:43.869Z"
	T-Mobile1_DC2_Tit...	10	Ack	161.214.48.107	"2025-08-14T21:00:40.737Z"
	T-Mobile2_DC1_Pol...	10	Ack	161.214.48.106	"2025-08-14T21:00:38.504Z"
	T-Mobile2_DC2_Tit...	10	Ack	161.214.48.107	"2025-08-14T21:00:41.212Z"
	Verizon2_Branchbu...	10	Ack	161.214.48.107	"2025-08-14T21:00:38.599Z"
	Verizon2_Southlake...	10	Ack	161.214.48.107	"2025-08-14T21:00:32.758Z"
	Verizon_Branchbur...	10	Ack	161.214.48.106	"2025-08-14T21:00:36.949Z"
	Verizon_Southlake-...	10	Ack	161.214.48.106	"2025-08-14T21:00:38.026Z"



## **Appendix 8 – FEMA IPAWS TSS Open Source Media Analysis**

The August 14<sup>th</sup> Live Test was well coordinated with all associated partners and agencies in the region, which helped raise awareness and prepare the public for the Live WEA Test. This was shown through stakeholders including nonprofits, elected officials, and state emergency management amplifying Multnomah’s messaging in preparation for the Live WEA Test ([example 1](#), [example 2](#), [example 3](#), [example 4](#), [example 5](#)). Over 5 different local media channels also amplified Multnomah County’s messaging and helped raise awareness, educate, and prepare citizens prepare for the Live WEA Test ([example 1](#), [example 2](#), [example 3](#), [example 4](#), [example 5](#)). Lastly, the WEA Test resulted in many people confirming on social media posts to have either received the test alert or not. Positive comments expressed “good job on communicating the test” and to have expected it, and some thanked the county for “[staying on top of alerts](#)” with the Live WEA test. Fewer comments highlighted a link was not working for them though the link worked, or that they did not receive the alert. The follow up work regarding the Live WEA Test has also generated media coverage, with different news channels informing the public on how [to report if](#) they did not receive the alert.

From Multnomah’s public information and education campaign to the test survey and data analytics it has pulled together, there are good materials that will help serve as an example to others conducting their conduct their own Live IPAWS Tests in the future.



*Photo credit: Riley Berger, Portland Water Bureau*