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R2602017

Wireless Service Quality Workshop (R.26-02-017)

Thursday, June 25, 2026



California Public
Utilities Commission

Agenda

9:30am – 9:45am	Opening Remarks by Commissioner Darcie L. Houck
9:45am – 11:15am	Session #1 Customer Service Metrics (moderated by Thomas J. Glegola, Administrative Law Judge)
11:15am – 11:30am	Break
11:30am – 12:00noon	Presentation on Cal OES Wireless Community Isolation Outages (moderated by Risa Hernandez, Branch Program Manager)
12:00noon – 1:00pm	Lunch Break
1:00pm – 2:30pm	Session #2 Outage Metrics: Cal OES Wireless Community Isolation Outages (moderated by Victor Smith, Deputy Chief of Staff)
2:30pm – 2:45pm	Break
2:45pm – 4:15pm	Session #3 Outage Metrics: Industry Key Performance Indicators (moderated by Robert Osborn, Division Director)
4:15pm – 4:30pm	Closing Remarks by Commissioner Darcie L. Houck

Opening Remarks

Commissioner Darcie L. Houck

Session #1 Customer Service Metrics

moderated by Thomas J. Glegola,
Administrative Law Judge

Session #1 Customer Service Metrics

Advocacy Panel Presentations	30 minutes
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Q&A for Advocacy Panel	15 minutes
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Industry Panel Presentations	30 minutes
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Q&A for Industry Panel	15 minutes
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Session #1 Questions for Advocacy Panelists

General Order 133-E has a Customer Service Standard that incorporates the following performance metrics:

- maintain a local, toll-free or collect call telephone access line 24 hours a day, seven days a week;
- require customer representative to answer 80% of the customer calls within 60 seconds;
- provide a postal mail component for customer service inquiries;
- resolve billing issues within 90 days, and direct outage inquiries to outage standard.

Please advise if the criteria above are appropriate performance benchmarks for wireless carriers.

Session #1 Questions for Advocacy Panelists

General Order 133-E contains a monthly fine mechanism for the Customer Service Standard that includes a general fund fine for noncompliance.

The fine calculation is as follows: the number of access lines x \$5 x 10 percent x number of days noncompliance / 365.

Please discuss whether a similar fine structure for wireless services should be adopted. If so, why and under what circumstances should fines be applied and how?

Session #1 Advocacy Panelists

Small Business Utility Advocates

Itzel Berrío Hayward, Regulatory Attorney

Cal Advocates

Madison Alcalay, Regulatory Analyst

Center of Accessible Technology

Paul Goodman, Legal Counsel

The Utility Reform Network

Regina Costa, Telecommunications Policy Director



Wireless Service Quality Virtual Workshop

Session 1: Customer service standards

Rulemaking 26-02-017 | June 25, 2026



- Customer service metrics should account for the distinct needs of small businesses.
- Enforcement standards should both incentivize compliance and remedy harm to ratepayers.
- Reporting requirements should promptly identify service quality disparities.

Customer Service Metrics

Madison Alcalay, Regulatory Analyst

June 25, 2026

Rulemaking (R.)26-02-027



The Public
ADVOCATES
OFFICE

Customer Service Standard Definition

The Customer Service Standard, previously the Answer Time Standard in GO 133-D, was renamed in GO 133-E to encompass both responding to and resolving customer inquiries.

General Order 133-E Customer Service Standard
Maintain a local, toll-free or collect call telephone access line 24 hours a day, seven days a week.
Require customer representatives to answer 80% of the customer calls within 60 seconds.
Provide a postal mail component for customer service inquiries.
Resolve billing issues within 90 days.
Direct outage inquiries to outage standard.

Should the Commission approve the GO 133-E Customer Service Standard for Wireless Providers?

General Order 133-E Customer Service Standard	Approve for Wireless Providers?
Maintain a local, toll-free or collect call telephone access line 24 hours a day, seven days a week.	Yes
Require customer representative to answer 80% of the customer calls within 60 seconds.	Modify
Provide a postal mail component for customer service inquiries.	Yes
Resolve billing issues within 90 days.	Modify
Direct outage inquiries to outage standard.*	Yes
No standard providing a chat component.	Add chat component standard

* Approve if the Commission adopts a wireless community isolation outage repair standard.

Customer Service Standard metrics that should be approved for Wireless Providers

The Commission should **approve** the following GO 133-E Customer Service Standard metrics for Wireless Providers:

General Order 133-E Customer Service Standard	Approve for Wireless Providers?
Maintain a local, toll-free or collect call telephone access line 24 hours a day, seven days a week.	Yes
Provide a postal mail component for customer service inquiries.	Yes
Direct outage inquiries to outage standard.*	Yes

*Approve if the Commission adopts a wireless community isolation outage repair standard.

Customer Service Standard metrics that should be modified for Wireless Providers

The Commission should **modify** the following GO 133-E Customer Service Standard metrics for Wireless Providers:

General Order 133-E Customer Service Standard	Cal Advocates Recommended Modification
Require customer representative to answer 80% of the customer calls within 60 seconds.	Require customer representative to answer 80% of the customer calls within 60 seconds and add a second tier of 95% of calls answered within 5 minutes.
Resolve billing issues within 90 days.	Resolve billing issues within 45 days. • If billing issues extend to 60 days the carrier must make further attempts to resolve the issue with the customer and cannot send the customer to collection until the issue is resolved.

Customer Service Standard metrics that should be added for Wireless Providers

The Commission should **add** the following GO 133-E Customer Service Standard metrics for Wireless Providers:

General Order 133-E Customer Service Standard	Cal Advocates Recommended Addition
No standard that provides a chat component on carrier's website.	Provide a chat component on the carrier's webpage and app to reach those who cannot access voice services.

The Commission should adopt language from the R.22-03-016 Proposed Decision of Commissioner Houck:

- Chat bots and other automated response systems can provide general information, but do not replace customer representative response.
- Any chat bot or automated system must provide *an option* to speak to a *live representative* within the first ten seconds of connection being made.

Recommended Customer Service Standard metrics for Wireless Providers

Recommended Customer Service Standard Performance Metrics for Wireless Providers
Maintain a local, toll-free or collect call telephone access line 24 hours a day, seven days a week.
Require customer representative to answer 80% of the customer calls within 60 seconds and add a second tier of 95% of calls answered within 5 minutes.
Provide a postal mail component for customer service inquiries.
Resolve billing issues within 45 days with additional requirements if extend to 60 days.
Direct outage inquiries to outage standard.*
Provide a chat component on the carrier's webpage and app to reach those who cannot access voice services.

* Approved if the Commission adopts a wireless community isolation outage repair standard.

Customer Service Standard Fine Calculation

General Order 133-E contains a monthly fine mechanism for the Customer Service Standard that includes a general fund fine for noncompliance. The fine calculation is as follows:

The number of access lines $\times$ \$5 $\times$ 10% $\times$ $\frac{\text{number of days noncompliant}}{365}$

Recommendation: The Customer Service Standard monthly fine should be applied regardless of the type of service provided. The Commission should adopt this fine mechanism for Wireless Providers and apply when providers do not meet the Customer Service Standard.

Cal Advocates 'Recommendations

1. Adopt GO 133-E Customer Service Standard metrics with modifications for Wireless Providers:

- Require customer representative to answer 80% of the customer calls within 60 seconds and add a second tier of 95% of calls answered within 5 minutes.
- Resolve billing issues within 45 days with additional requirements at 60 days if issues are not resolved.
- Provide a chat component on the carrier's webpage and app to reach those who cannot access voice services.

2. Adopt the GO 133-E Customer Service Standard fine mechanism for Wireless Providers.

Session #1: Customer Service Metrics



Paul Goodman
Center for Accessible Technology

General Observations

- Service quality requirements are “least efforts” metrics. Providers need to stop acting as if they are an indicator of service quality. They’re an indicator that the provider is putting minimal effort into service quality.
- Averages or percentages don’t measure issues, they hide them.
 - A huge percentage of customers never need to call customer service. That doesn’t mean we shouldn’t address the needs of customers that do need to call customer service.
 - “Coverage availability of 98.9% to 99.4% for the three major carriers that are parties to this proceeding” allows providers to paper over where there were coverage problems, how often those coverage problems occurred, and which communities were impacted.
 - 50 percent of customers receive service quality that is below average.
- The reason for a service quality problem, whether caused by the provider, a customer, or a third party, is broadly irrelevant.
 - This is not about provider efforts or culpability. It is about ensuring that providers have sufficient staffing, equipment, and redundancy to ensure that customers receive a minimum level of customer service.

Customer Service Standards

- 24/7 Customer service line and postal mail component must be accessible.
 - All communications must be in accessible formats (e.g., 14 point sans serif font).
 - All websites must be compatible with [Web Content Accessibility Guidelines version 2.2AA](#) and all [successor standards](#), confirmed by live user testing.
 - Providers must hire and train designated customer service representatives who specialize in assisting individuals with vision, hearing, mobility, and cognitive impairments who are available 24/7.
- 24/7 customer service line and postal mail component must be available in-language for customers who prefer to communicate in a language other than English.

Customer Service Standards

The 80% of customer calls w/in 60 seconds metric is unacceptable.

- This metric incentivizes providers to disregard 20 percent of customer calls.
- More than 60 seconds could be 65 seconds, an hour, or never.
 - Providers should report percentage of calls answered within two minutes, five minutes, 15 minutes, or never.
 - Providers should report, by zip code, where a customer made more than one customer service call within two weeks, one month, or three months.

Fine Mechanism

- Service Quality interruptions create costs far beyond customers paying for service they're not receiving.
 - Businesses that rely on service.
 - Health care
 - Education
- Fines should escalate:
 - Current mechanism:
 - $(\text{number of lines} * \$5 * 0.1) / 365 \rightarrow (\text{number of lines} * \$5) / 3650$
 - $(\text{Number of lines} * \$0.0014) / \text{day}$.
 - Escalating fines: $\text{number of lines} * (X \times (2^N - 1)) / 3650$
 - X is the base fine;
 - N is the number of days the provider is out of compliance.

Fines and Customer Credits

- Fines are a penalty meant to incentivize providers' failure to meet minimum standards of service quality.
- Refunds/customer credits are meant to make customers whole when they fail to receive adequate customer service.
- The Commission's Wireless Service Quality standards should require both general fund fines and automatic customer credits.

Workshop Session # 1 – Customer Service Metrics

Rulemaking 26-02-017

June 25, 2026



- TURN generally supports the proposed customer service standard, with the modifications described by Cal Advocates.
- We echo the comments of the Center for Accessible Technology and Cal Advocates about the importance of being able to promptly reach live customer service representatives by telephone, and also when using web-based chat. As TURN and CforAT have argued, customers should not be subjected to a never-ending loop of customer service reps who turn out to be AI. A customer's time is important. This is especially the case in situations where the signal at a customer's home or business is so poor that the customer has to drive to a location with a better signal to even contact customer service.
- The proposed rules should be modified to provide customers with the ability to immediately reach a live representative.

Further Clarification for Customer Service Standard Outage Inquiries

- One of the criteria for the Customer Service Standard in the previously proposed General Order 133-E (R.22-03-016) should be clarified. The requirement that “outage-related inquiries must be directed to the appropriate standards” is not clear.
- Limiting the reporting of customer service contacts to outages only associated with Wireless Community Isolation Outages is not sufficient.
- One option would be to require the large wireless carriers to provide customers who call to report a problem with their service with the telephone number/contact information for the Commission’s Consumer Affairs Branch.

Data Collection

- One important aspect of service quality reporting is that it generates data that allows the Commission to identify problems that it then may address, whether through revised rules or some other form of action.
- The Commission and its staff should periodically review the required service quality data, in conjunction with data regarding customer service generated by customer contacts with the Consumer Affairs Branch.
- This analysis would give the Commission a much better picture of the quality of customer service, and the ability to assess impacts on different categories of customers.

Session #1 Questions for Industry Panelists

How does your company prioritize the quality of customer service given to customers?

Please include an overview of the performance standards your company currently measures and tracks as they relate to customer service.

Session #1 Questions for Industry Panelists

Does your company track performance standards similar to GO 133-E? Please provide details on standards and implementation details. Please indicate how much incremental costs, if any, are required to track and meet these performance standards.

Please explain if the GO 133-E fine structure should extend to the customer service standard for wireless services.

Does your company currently provide an automatic customer credit or incentives for consumers if your company fails to meet established customer service standards?

Session #1 Industry Panelists

AT&T

Stanley Vigil, Director, Advance Analytics;
Andy Umaña, Attorney

T-Mobile

John Consalvo, Senior Director, Care Planning and Strategy
Leon Bloomfield, Outside Regulatory Counsel

Verizon

Connie Chaffins, Senior Director, Program & Project Management;
Barry Carlsen, Associate Director, Operations Support



WIRELESS SERVICE QUALITY OIR

Workshop #1

Session #1: Customer Service Metrics

June 25, 2026

It Starts with the Customer

AT&T's investment in customer service is based on a deliberate competitive strategy focused on understanding and responding to what customers value most in their wireless customer service experience. AT&T prioritizes customer service in the following ways:



**Quantitative Analysis,
Qualitative Research, and
Experience Simulations**



**Balanced Scorecard
with KPIs**

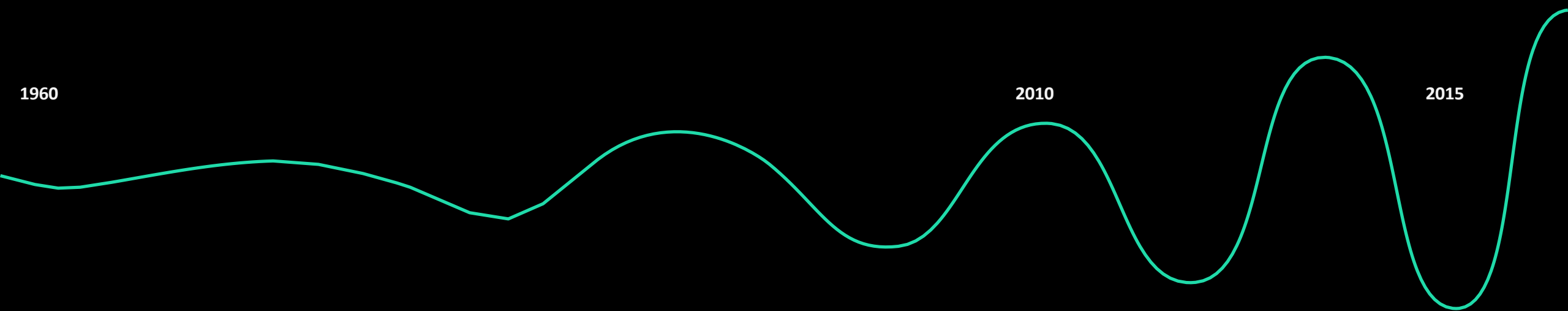


**Independent Third-party
Benchmarking**



**Competitive Advantage - AT&T
Guarantee**

Expectations Are Changing Faster Than Ever Before





THANK YOU

June 25, 2026



Wireless Service Quality Workshop

Session 1

Customer Service Metrics

T-Mobile – Committed to World-Class Customer Experience

Presented to the California Public Utilities Commission | June 2026

Presentation Overview



01

Innovation: Meeting Customers Where They Are

Priority routing, omnichannel support, AI-powered call routing & virtual hold

02

How T-Mobile Prioritizes Customer Service Quality

Specialized expert teams, smart routing & flexible staffing models

03

Key Performance Indicators

The common core metrics T-Mobile uses, among others, to track, measure and improve customer service quality

Innovation | Meeting Customers Where They Are



T-Mobile gives customers multiple ways to get help—and uses technology to make every contact faster and more effective.

▲ PRIORITY RESPONSE



Disaster Response: Priority Routing

During declared disasters (e.g., the LA wildfires), T-Mobile automatically moves affected customers to the front of the care queue for assistance.

▲ OMNICHANNEL ACCESS



Customer Driven Omnichannel Experience

Customers reach T-Mobile how they prefer: phone, chat, in-store, social media, self-service app, or automated phone menu. Each channel is staffed and purpose-built.

▲ VIRTUAL HOLD



Virtual Hold

When wait times are higher than normal, T-Mobile offers a callback option so customers don't wait on hold—convenience on their schedule.

▲ AI-POWERED ROUTING



AI-Powered Predictive Routing

T-Mobile uses AI to route each caller to the right specialist based on their account and history—reducing transfers and getting to a resolution faster.

How T-Mobile Prioritizes Customer Service Quality



Specialized Expert Teams (Non-Exhaustive)

General Billing & Onboarding

Account setup, billing questions, first-contact resolution

Technical Care

Device, network and connectivity specialists

Chat Support

Digital-first experts for non-voice customers

Spanish Language Support

Dedicated teams; equitable access for all

Social Media Care

Twitter/X, Facebook, Instagram — real-time expert response

Retention & Advanced Care

Senior experts for complex or escalated issues

Routing, Standards & Staffing Models



First-Call Resolution as Primary Goal

Calls are routed to the right specialist the first time, reducing the need for transfers.



Customer-Experience Designed Staffing

Staffing levels are set to answer speeds that customers notice—based on what drives satisfaction.



Extended Hours: 4am–9pm PDT, 7 Days

T-Mobile operates care 17 hours/day (4am–9pm PDT), 7 days/week. During the remaining 7 overnight hours, customers are directed to digital self-service options. This flexible approach serves diverse needs—prescriptive “one-size-fits-all” mandates could undermine it.



Continuous Certification Programs

Agents receive ongoing training on products and communication skills to stay current and effective.

Performance Measurement: A Fluid, Multi-Faceted Approach



Customer care is driven by competition, innovation, and customer input; not by a single set of metrics. T-Mobile considers the following to generally be its standard key internal performance indicators for customer service.



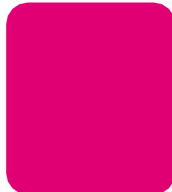
Average Speed of Answer (ASA)

Average time before a customer reaches a live agent



Care Net Promoter Score (NPS)

Measures customer loyalty and satisfaction following a care interaction



IVR Net Promoter Score (NPS)

Measures customer satisfaction with automated self-service interactions

Estimated General Order 133-E Compliance Costs



T-Mobile provided estimates of the additional compliance costs associated with the hypothetical extension of the current GO 133-E Customer Care mandates to wireless carriers per the OIR. A few highlighted concepts are noted below.

Customer Care is Part of a Nationwide System

T-Mobile's customer care system is not designed to operate on a state-specific basis; all estimates were based on retooling T-Mobile's entire system nationwide. To do otherwise would be impractical, inconsistent with the manner in which T-Mobile's customer care organization is built, create inconsistent customer experiences and otherwise be harmful to the consumers.

Customer Care is Focused on U.S.-Based Operations

T-Mobile focuses on providing customer care using U.S.-based facilities and personnel.

Estimates are Based Primarily on Increased Staffing and IT Costs

The estimates excluded the following: the costs or time associated with building or otherwise acquiring facilities that would be needed to provide the additional personnel with workspaces, ongoing operating expenses associated with these changes, and any capital expenditures necessary to build out the systems to manage the anticipated increased call volume and the 60 second ASA.

Thank you!



Questions?



CPUC Workshop

R.26-02-017

June 2026

Session #1:

Customer Service Metrics



verizon

New Customer Service Initiative

Verizon has announced that it is committed to becoming the most customer-obsessed company in the telecom industry.

- Verizon replaces complexity and friction with simplicity and true customer choice
- An industry-leading loyalty program
- Two new plans that are simple and customer-friendly



verizon

CustomerService Priorities

- Overall customer satisfaction
- 24x7 digital and chat support
- Allow customers to schedule callbacks



verizon

Key Customer Performance Standards

- Strive to meet call answer time metrics
- Live customer service support between 8am– 7pm (Mon. – Sat.) & 8am– 5pm (Sun); live daily tech support between 8am– midnight
- 24-hour chat availability
- Strive to resolve all customer service inquiries in a timely manner
- Real-time monitoring to ensure responsiveness



verizon

The Cost of Implementing GO133-E:

Customer Service Standards

- Significant additional costs - please refer to previous Confidential responses
 - Administrative and personnel costs related to hiring and training
 - Process implementation
 - System modifications



verizon

Break

Presentation on Cal OES Wireless Community Isolation Outages

moderated by Risa Hernandez, Program Manager
Carrier Oversight & Programs Branch

Cal OES Wireless Community Isolation Outages

California Governor's Office of Emergency Services

Andrew Mattson, Program Management Division Chief

California Public Utilities Commission

Wylen Lai, Regulatory Analyst



***Cal* OES**

GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

A large, faint, light-colored graphic of a bear silhouette is positioned in the background, spanning across the middle and right side of the slide. A single gold star is located above the word "Community" in the title.

Cal OES Community Isolation Reporting CPUC June 25, 2026



Agenda

1. Community Isolation Definition
2. Governance
3. Outage Dashboard
4. Daily Rollup
5. Public Facing Information
6. Outage Notification
7. Questions
8. Additional Information



Community Isolation Definition

- A community isolation outage occurs when a telecommunications service provider's end users are unable to make 9-1-1 calls or receive emergency notifications.
- By law, Cal OES is notified when:
 - Wireline - An outage that lasts at least 30 minutes and potentially affects (A) at least 100 end users in a single ZIP Code, or (B) at least 50% of end users in a ZIP Code with fewer than 100 end users;
 - VoIP - an outage that lasts at least 30 minutes and potentially affects (A) at least 100 end users in a single ZIP Code, or (B) at least 50% of end users in a ZIP Code with fewer than 100 end users;
 - Wireless - an outage that lasts at least 30 minutes and affects at least 25 percent of a carrier's coverage area in a single ZIP Code

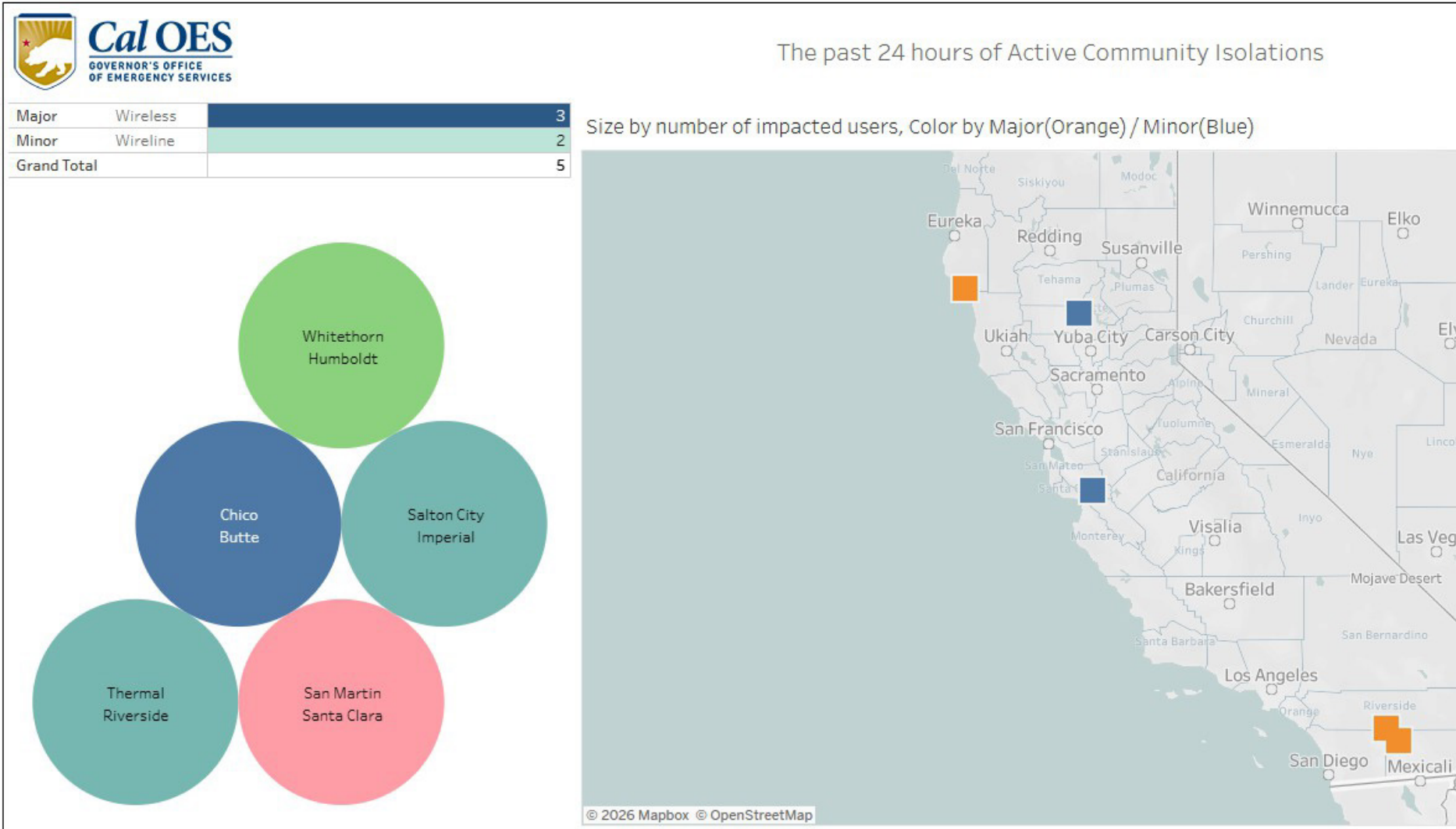


Governance

- SB 670 and 341 are the legislation that governs community isolation outage reporting in California.
 - 2019 Legislative session
 - <https://www.caloes.ca.gov/wp-content/uploads/PSC/Documents/11b-SB-670-Bill-and-Leg-History.pdf>
 - 2021 Legislative session
 - <https://www.caloes.ca.gov/wp-content/uploads/PSC/Documents/11a-SB-341-Bill-Leg-History.pdf>
- Relevant legislation and CPUC regulations are posted on Cal OES website
 - [Outage Reporting page](#)



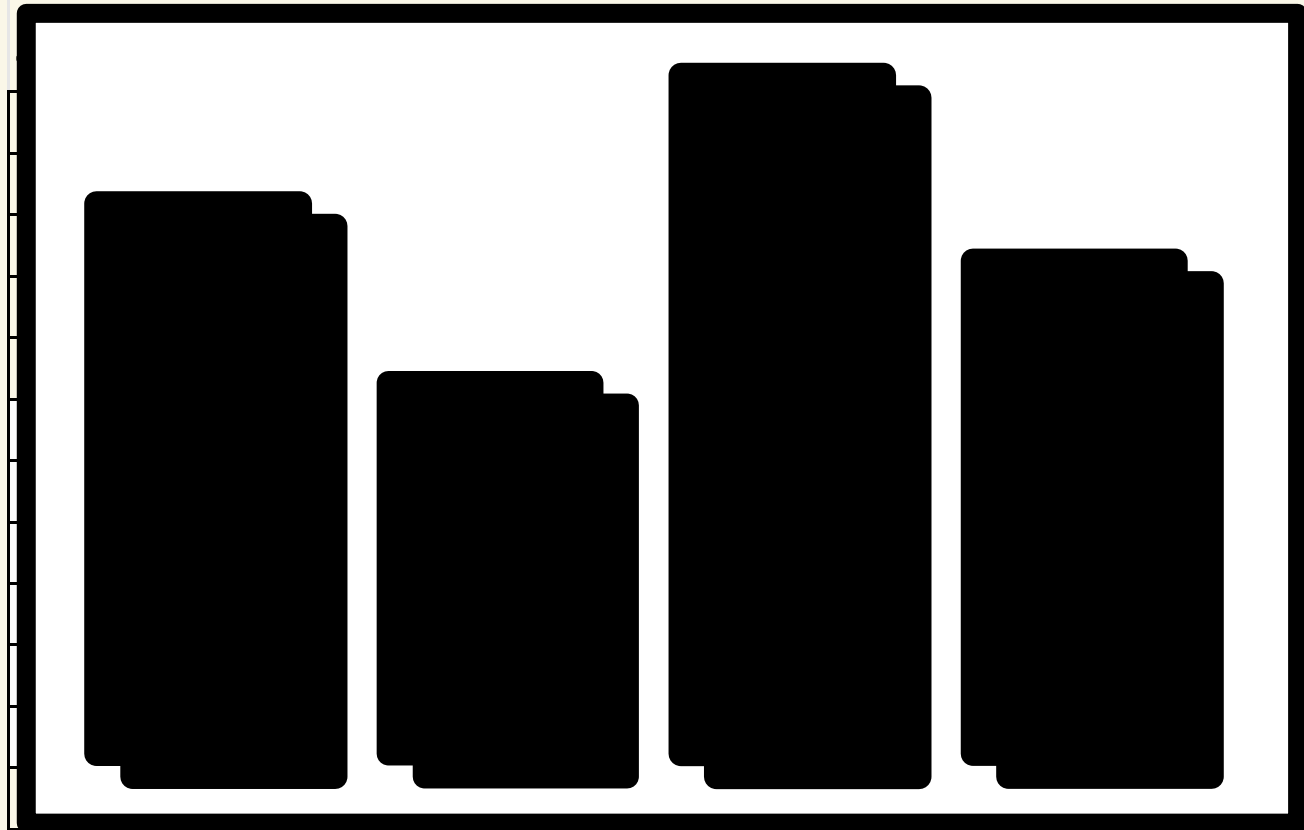
Outage Dashboard





Public Facing Information

- Outage reporting by aggregate:





Outage Notification

- 9-1-1 Duty Officer on call 24/7
 - 5 staff rotation
 - 1 week shift, hand off every Thursday at 0900
 - Is on standby for any phone calls from telcos, OES exec, CA State Warning Center, etc.
- Outage notifications are delivered via email. 9-1-1 DO is only engaged for escalation purposes.
- All outage notification are emailed to Cal OES 9-1-1 inbox
 - Emails are auto forwarded to vendor, then scraped and plotted on dashboard
 - Automates the process
- Outage reporting dashboard: <https://public.community-isolation.ca.nga911.com/dashboard>



Questions

Please feel free to reach out with any questions,
comments, or concerns

Andrew Mattson

Program Management Division Chief

CA 9-1-1 Emergency Communications Branch

(916) 894-5018

Andrew.Mattson@caloes.ca.gov



CA Code of Regulations – Reporting Thresholds

- **§ 2480.2. Community Isolation Outage Reporting Thresholds.**
- (a) A community isolation outage that limits a telecommunications service provider's end users' ability to make 911 calls or receive emergency notifications shall be deemed to exist, and must be reported to the office, when any of the following conditions exist:
 - (1) For telecommunications service provided by facilities-based carriers, other than mobile telephony service as defined in Public Utilities Code section 224.4 or VoIP service as defined in PUC code 239, herein referred to as wireline, an outage that lasts at least 30 minutes and potentially affects (A) at least 100 end users in a single ZIP Code, or (B) at least 50% of end users in a ZIP Code with fewer than 100 end users;
 - (2) For telecommunications service provided by Voice over Internet Protocol or Internet Protocol enabled service, as those terms are defined in Public Utilities Code section 239, an outage that lasts at least 30 minutes and potentially affects (A) at least 100 end users in a single ZIP Code, or (B) at least 50% of end users in a ZIP Code with fewer than 100 end users;
 - (3) For telecommunications service provided by mobile telephony service, as that term is defined in Public Utilities Code section 224.4, an outage that lasts at least 30 minutes and affects at least 25 percent of a carrier's coverage area in a single ZIP Code;
 - (4) For any telecommunications service, whenever the office determines that a community isolation outage meeting any of the criteria specified in paragraphs (1) - (3) exists within an identifiable ZIP Code or ZIP Codes and provides notice of its determination and identification of the ZIP Code or ZIP Codes to a telecommunications service provider. For purposes of this paragraph, every telecommunications service provider subject to these regulations shall provide the office at least one designated point of contact or similar means to receive and respond to such notices.
- (b) Nothing in subdivision (a) precludes or limits the ability of a telecommunications service provider to notify the office of a community isolation outage whenever a provider reasonably suspects or believes such an outage exists.



CA Code of Regulations – Notification Requirements

- **§ 2480.3. Notification Requirements.**
- (a) Telecommunications service providers shall provide the notices required by Government Code section 53122, subdivision (c) via electronic submission to the office. Electronic notices shall be made in a format prescribed by the office and submitted to CA911outages@caloes.ca.gov. The office may implement an alternative online submission method, including through an application program interface, and upon such implementation, providers may use the alternative submission method in lieu of the office's form. Telecommunication carrier's compliance is required with the prescribed electronic submission format within 90 days of notification from the office.
- (b) For purposes of the requirement in Government Code section 53122 that notification to the office include “a description of the estimated area affected by the outage and the approximate communities, including cities, counties, and regions, affected by the outage,” telecommunications service providers shall list each affected ZIP Code, with an associated, readily-identifiable descriptive term that will enable validation of the ZIP Code, such as the name of a city, county, community name, or similar descriptive term, which shall be deemed sufficient for purposes of the initial notification to the office.
- (1) For wireline and VoIP outages, the notice shall also include the estimated number of potentially impacted end users.
- (2) For mobile telephony outages, the notice shall also include the estimated percentage of coverage degradation in the affected ZIP Codes.



Notification Requirements – Cont.

- (c) For the purposes of the requirement in Government Code section 53122 that notification to the office include “the estimated time to repair the outage” and “when achieved, the restoration of service,” telecommunications service providers shall submit updated notifications at least once every 6 hours from the most recent notification until the service has been restored, and a final notification once the service has been restored.
- (d) Nothing in subdivision (c) precludes or limits the ability of a telecommunications service provider to provide an update to the office whenever a provider reasonably suspects or believes an update is required.
- (e) Each provider of telecommunications service that provides access to 911 service shall maintain on its internet website a public outage map showing that provider's outages. The public outage map for each provider shall be available upon each notification to the office and shall include, at a minimum, the following information:
 - (1) Map indicating the geographic area impacted by the outage.
 - (2) Zip code(s) of the impacted area.
 - (3) Type of outage: Wireline, Voice over Internet Protocol (VoIP) or Mobile Telephony.
- This map shall be posted by the provider of telecommunications service within 60 minutes of the discovery of a new outage and updated at least once every 6 hours from the most recent notification until the service has been restored



SB 670

- (c) Upon the adoption of regulations pursuant to subdivision (b), all providers of telecommunications service that provide access to 911 service shall notify the office whenever a community isolation outage occurs that limits their customers' ability to make 911 calls or receive emergency notifications. The community isolation outage notification shall be provided within 60 minutes of discovery of the outage by the provider, and the office shall be responsible for notifying any applicable county office of emergency services, the sheriff of any county, and any public safety answering point affected by the outage. The community isolation outage notification to the office shall be by a medium specified by the office, and shall include the telecommunications service provider's contact name and calling number and a description of the estimated area affected by the outage and the approximate communities, including cities, counties, and regions, affected by the outage. The telecommunications services provider shall also notify the office by a medium specified by the office of both of the following:
 - (1) The estimated time to repair the outage.
 - (2) When achieved, the restoration of service.
- (d) The telecommunications service provider shall ensure that the calling number provided to the office with the community isolation outage notification is staffed by a contact person who shall be available to respond to inquiries about the outage at all times until the provider notifies the office that service has been restored.
- (e) Except as provided in subdivision (c), the office shall keep community isolation outage notifications confidential and shall not disclose the contents of the notifications.
- **SEC. 2.**
 - The Federal Communications Commission has stated that telecommunications outage reports contain "sensitive data, which requires confidential treatment" because the data "could be used by hostile parties to attack those [telecommunications] networks, which are part of our Nation's critical information infrastructure" (In the Matter of New Part 4 of the Commission's Rules Concerning Disruptions to Communications (Aug. 19, 2004, FCC 04-188)), and the Public Utilities Commission already treats information regarding telecommunications outages submitted to the commission as confidential. Therefore, the Legislature finds that the interest in public disclosure of contemporaneous telecommunications outage information submitted to the Office of Emergency Services is outweighed by the interest in protecting public safety.



■ Summation language:

- (1) Existing law requires the Office of Emergency Services, on or before July 1, 2020, by regulation, to adopt appropriate thresholds for determining whether a telecommunications service outage constitutes a community isolation outage based on the risks to public health and safety resulting from the outage. Existing law requires all providers of telecommunications service that provide access to 911 service to notify the office whenever a community isolation outage occurs that limits their customers' ability to make 911 calls or receive emergency notifications. Existing law requires those community isolation outage notifications to include certain information, including a description of the estimated area and community affected by the outage.
- This bill would require each of those providers of telecommunications service to maintain on its internet website a public outage map showing that provider's outages, and would require the office, in consultation with the Public Utilities Commission, on or before July 1, 2022, to adopt by regulation requirements for those maps, as specified. The bill would authorize the office to provide the commission with all of the information provided to it as part of a telecommunications service provider's community isolation outage notification and require the office to aggregate that data and post that aggregated data on its internet website.

Cal OES Community Isolation Outages (2023 – 2025)

Type	Wireless			
Carriers	All			
	2023	2024	2025	
Grand Total	5,902	5,615	5,956	

Cal OES Community Isolation Outages (2023 – 2025)

Type	Wireless			
Carriers	All			
	2023	2024	2025	Percent to Total
missing data	35	27	401	2.6%
less than 30 min			3	0.0%
30 min to 1 hr	203	296	568	6.1%
1-2 hours	1,606	1,328	1,413	24.9%
2-4 hours	1,060	1,027	1,074	18.1%
4-6 hours	914	915	813	15.1%
6-12 hours	836	1,014	806	15.2%
12-24 hours	672	607	506	10.2%
24-48 hours	348	233	222	4.6%
48-72 hours	78	65	44	1.1%
over 72 hours	150	103	106	2.1%
Grand Total	5,902	5,615	5,956	100.0%

Cal OES Community Isolation Outages (2023 – 2025)

Average outage duration **days** for outages exceeding 72 hours

Type	Wireless			
Carriers	All			
	2023	2024	2025	Percent to Total
over 72 hours	13.8	6.8	10.0	2.1%

Number of outages with missing data

Type	Wireless			
Carriers	All			
	2023	2024	2025	Percent to Total
missing data	35	27	401	2.6%

Lunch Break

12:00 Noon to 1:00 PM

Session #2 Outage Metrics – Cal OES Wireless Community Isolation Outages

moderated by Victor Smith, Deputy Chief of Staff
Office of Commissioner Darcie L. Houck

Session #2 Outage Metrics – Cal OES Wireless Community Isolation Outages

Industry Panel Presentations	30 minutes
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Q&A for Industry Panel	15 minutes
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Community Panel Presentations	30 minutes
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Q&A for Community Panel	15 minutes
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Session #2 Questions for Industry Panelists

Per California Code of Regulations Title 19 § 2480.2, a community isolation outage is an outage that lasts at least 30 minutes and affects at least 25 percent of a carrier's coverage area in a single zip code and limits wireless carriers' end users' ability to make 911 calls or receive emergency notifications.

Session #2 Questions for Industry Panelists

Provide an overview of drivers of increases or decreases in community isolation outages from 2023 through 2025.

Does your company estimate the number of impacted access lines for these outages? Are you providing any automatic customer credit to those impacted by outages?

How do community isolation outages impact access to emergency services? Does your company work with local agencies or take further action to mitigate those impacts?

Session #2 Questions for Industry Panelists

Outages exceeding 72 hours are a cause for concern. Does your company have a plan to address these extended service outages? Does your company issue customer credits related to prolonged duration of service outages?

Please present the factors that your company accounts for in determining whether a customer credit is issued. Please also explain whether customer credits are automatically applied or require customers to submit a request.

Session #2 Questions for Industry Panelists

Using community isolation outage as a measure, please present how you would establish an outage repair standard. Consider factors such as outage duration threshold(s) and fine mechanism (general fund fine and/or automatic customer credit).

Regarding wireless service quality standards, what and how should the CPUC collect and incorporate consideration for ESJ, tribal, and rural communities?

Session #2 Industry Panelists

AT&T

Josh Mathisen, Director, Regulatory;
Raymond P. Bolaños, Attorney

T-Mobile

Andy Gormely, Member, Technical Staff Regulatory
Compliance;
Leon Bloomfield, Outside Regulatory Counsel

Verizon

Andis Kalnis, Associate Director, Network Engineering



Wireless Service Quality OIR Workshop #1

Session 2: Outage Metrics – Cal OES

June 25, 2026

Cal OES Data Does Not Support New Wireless Outage Mandates

1

Existing 911 redundancy and emergency coordination already protect public safety

2

Reported outage increases reflect changes in reporting thresholds, not performance degradation

3

Average outage durations remain low; 72-hour events are rare outliers

4

A significant share of outages are planned maintenance; many others are driven by factors outside carrier control

5

Competition already drives network efficiency and rapid restoration, and provision of customer credits in case of outages

6

New mandates would divert resources from network investment in favor of compliance reporting



THANK YOU

June 25, 2026



Wireless Service Quality Workshop

Session 2

Cal OES Community Isolation Outages

T-Mobile – Committed to Building a Stronger, Smarter and
More Resilient Network

Presented to the California Public Utilities Commission | June 2026

Industry Uptime – Cal OES

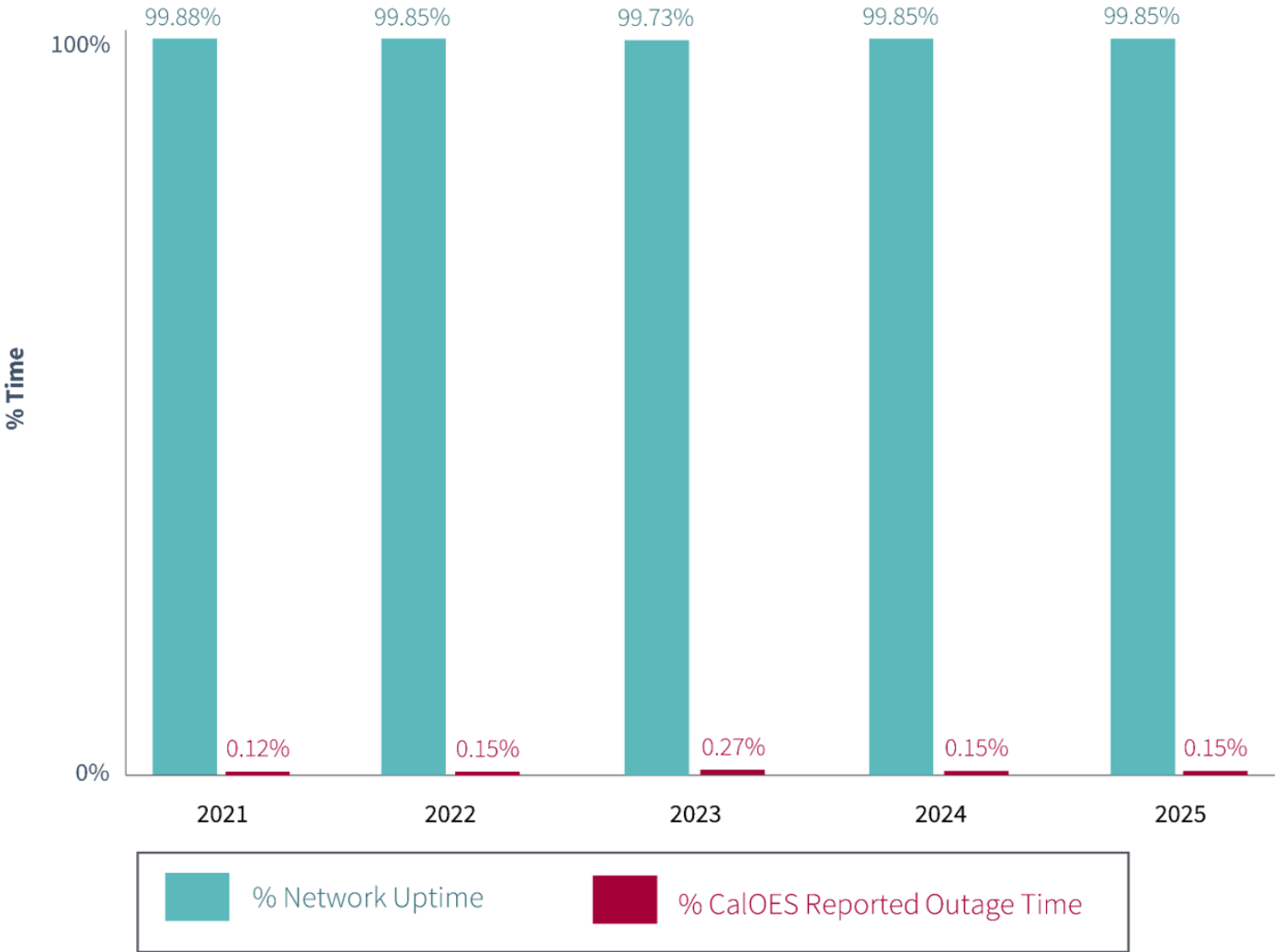


Cal OES Data – Over 99% Uptime

An analysis of Cal OES outages indicates that average wireless network uptime is significantly above 99% for each of the past 5 years.

Chart is a copy of Attachment A from CTIA Motion to Submit Aggregated Data (June 22, 2026)

Network Uptime



Coverage Availability - Opensignal

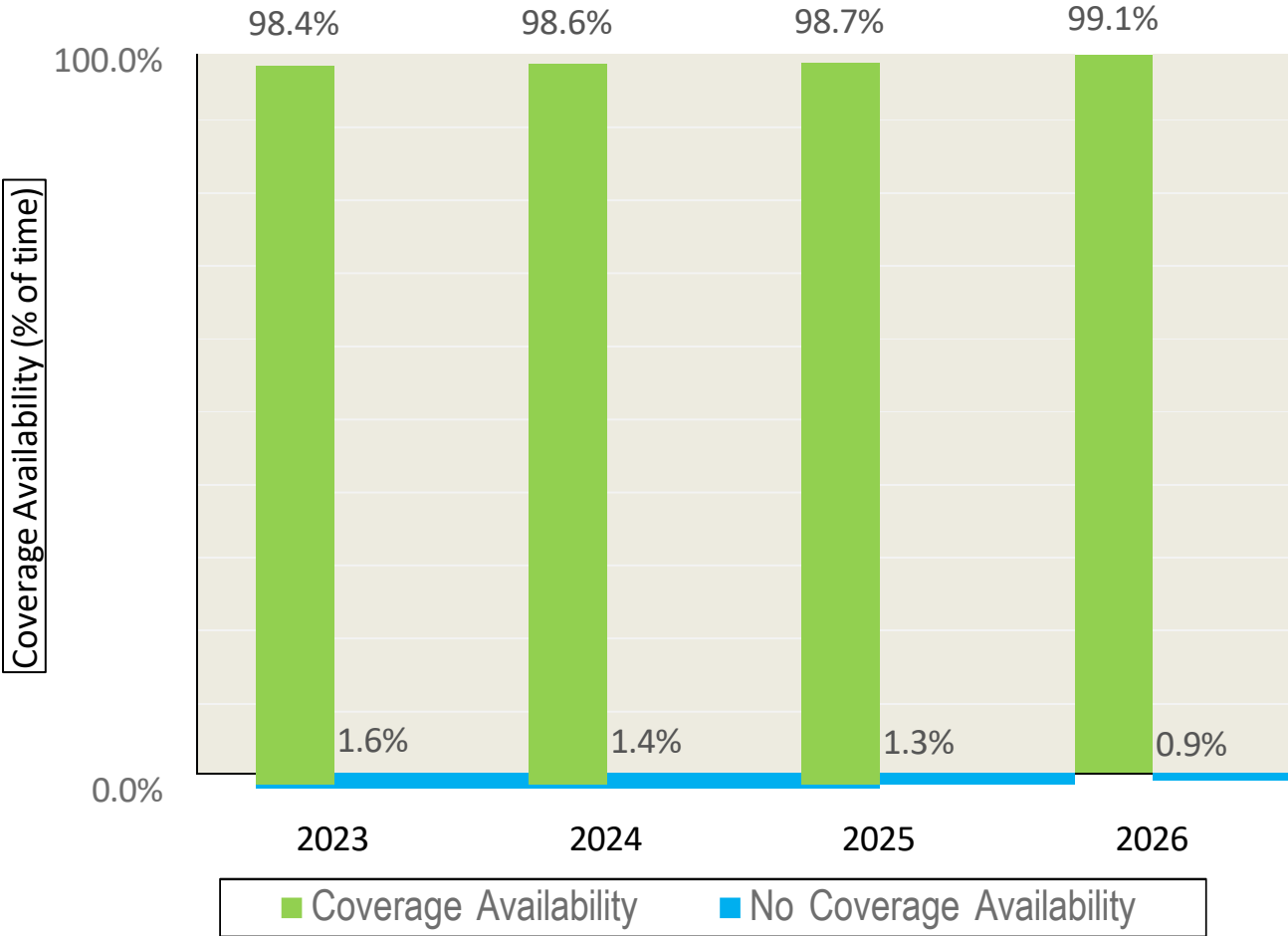


Opensignal Data - Over 98% of Time

An analysis of Opensignal Reports similarly indicates that average coverage availability is well above 98% for each of the past 4 years.

Opensignal describes this metric as a “...measure [of] what proportion of time people have a network connection, in the places they most commonly frequent — something often missed by traditional coverage metrics. “

Average Provider Coverage Availability in California - Opensignal*



* As reported by Opensignal in their publicly available January 2023 – 2026 Mobile Network Experience Reports.

Cal OES Community Isolation Outages - Trends



01

Cal OES Community Isolation Outages - Near 100% Network Availability

Outages cannot be categorically prevented but the aggregated Cal OES data indicates well over 99% network availability over the past 5 years.

02

Cal OES Community Isolation Outages Are Limited in General and Have Trended Downward in the Past Three Years

The number of Cal OES Community Isolation Outages is generally limited as reflected by the overall network availability uptime. The industry aggregated data provided by CTIA confirms that the number of Cal OES Community Isolation Outages has consistently trended downward over the past three years although these trends are not necessarily in the control of the providers and, given the relatively limited number of outages, only modestly impact the overall uptime of the networks.

03

T-Mobile's Cal OES Community Isolation Outages are Consistent with Industry Trends

The number of T-Mobile Cal OES Community Isolation Outages by ZIP Code and the total annual duration has declined steadily over the past three calendar years. This current trend does not materially impact the overall uptime or reliability of the network.

Cal OES Community Isolation Outages – Aggregated Data



Average Annual Number of ZIP Codes in Cal OES Community Isolation Outage Reports

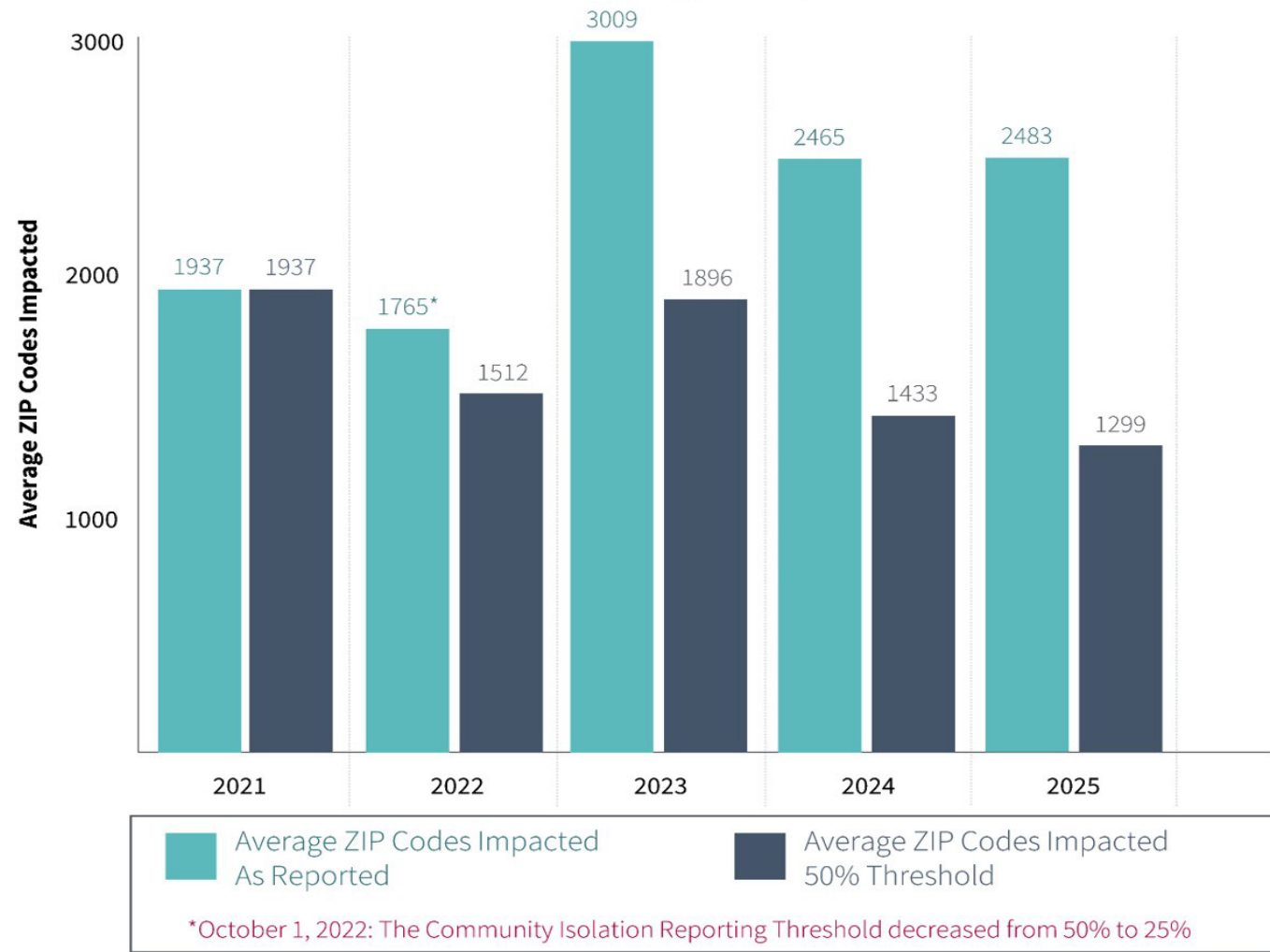


Chart is a copy of Attachment B from CTIA Motion to Submit Aggregated Data (June 22, 2026)



Cal OES: 9-1-1 Access, Extended Outages, Impacted User Counts



EMERGENCY 911 ACCESS

- Federal rules ensure 911 calls are completed via compatible networks—if one wireless carrier is down, another carries the call.
- T-Mobile's satellite service provides an additional tool to maintain wireless service including 9-1-1 connectivity.
- Community isolation outages do not necessarily impact access to emergency services.



IMPACTED USER COUNT

- Community isolation outage reporting does not track impacted users.
- No current ability to reliably identify or estimate how many, if any, or which customers are impacted.
- Customers are, by definition, mobile at any given time.
- No way of determining wi-fi or other means of connectivity even in impacted areas.



EXTENDED OUTAGES

- T-Mobile's Cal OES Community Isolation Outages with durations beyond 72 hours are the exception and extremely limited.
- Network outages are generally caused by outside factors such as backhaul cuts, emergency disasters like wildfires and severe weather, and disruptions to commercial power.
- T-Mobile deploys temporary measures while permanent repairs are arranged wherever feasible.
- T-Mobile's Cal OES Reporting is conservative; it does not account for some temporary measures for restoring service such as COWs, COLTs and neighboring site antenna adjustments.



Thank you!

Questions?

Session #2:

CalOES Reports



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Wireless Providers Compete on Network Performance

Rootmetrics 2H 2025 Report (National Testing)

“Verizon delivered the strongest results in 2H 2025, earning seven U.S. RootScore Awards, including ...best overall network performance and the Reliability RootScore Award”

AT&T Results

“Delivered strong national results in 2H 2025, sharing three U.S. RootScore Awards”

T-Mobile Results

“Continued to perform well in 2H 2025, maintaining the highest 5G availability at 95.2%”

“U.S. mobile consumers ... benefit from this ongoing horse race”



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Network Uptime is High

Based on CalOES outage data aggregated among the three major providers, average network uptime:

2023– 99.73%
2024– 99.85%
2025– 99.85%

Data sourced from California Governor's Office of Emergency Services (CalOES) community isolation outage reports and CTIA Motion to Submit Aggregated Data Relevant to Issues in This Proceeding (6/22/26) .



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Factors Beyond Provider Control

Infrastructure & Environment

Backhaul: Prone to damage, theft, and vandalism

Disasters: Natural and man-made catastrophes

Weather/Foliage: Snow on cell sites, foliage interference

Location Challenges

- Insufficient backhaul options
- Lack of space for backup power
- Terrain and access constraints

External Entities

Regulatory & Zoning: Permitting and zoning issues

Third Party Issues:

- Network dependencies
- Frequency interference



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Verizon Credit Policy

Identifying All Affected Customers is Infeasible

Difficult to accurately identify all affected customers from cell site outage due to the mobile nature of wireless service. Backhaul and core network outages may be even more difficult.

Credits for Disrupted Service

Postpay customers can call within 180 days

Eligibility requires experiencing an outage greater than 24 hours to receive a credit.



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Q & A

Session #2 Questions for Community Panelists

What are the challenges your community faces with wireless services? Has your community experienced wireless service quality or outage issues?

In communities that experience prolonged wireless community isolation outages, how can the CPUC implement a Corrective Action Plan enforcement mechanism (like the one in GO 133-E) to make meaningful progress in meeting service quality standards?

Session #2 Community Panelists

Lake County

Jessica Pyska, Supervisor

Hoopa Valley Public Utilities District

Linnea Jackson, General Manager

Mono County

Rhonda Duggan, Supervisor

Tribal Broadband Bootcamp

Matt Rantanen, Cofounder

Nevada County

Sue Hoek, Supervisor

Western Fire Chiefs Association

Ken Kehmna, Fire Chief, Senior Operations Advisor

PUBLIC UTILITIES COMMISSION PRESENTATION

COBB MOUNTAIN CELL SITE JUNE 2026

Lake County

Jessica Pyska, Vice Chair of the Board of Supervisors
Representing District 5









Q & A

Break

Session #3 Outage Metrics – Industry Key Performance Indicators

moderated by Robert Osborn, Director
Communications Division

Session #3 Outage Metrics – Industry Key Performance Indicators

Industry Panel Presentations	30 minutes
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Q&A for Industry Panel	15 minutes
------------------------	------------

Advocacy Panel Presentations	30 minutes
------------------------------	------------

Q&A for Advocacy Panel	15 minutes
------------------------	------------

Session #3 Questions for Industry Panelists

What key performance indicators (KPIs) does your company currently measure and track?

What tools or systems does your company use to monitor service quality in real time, and what are your company's service quality benchmarks?

At what geographical granularity does your company measure these KPIs? How does your company ensure every community is accounted for, especially ESJ areas, tribal lands, and rural areas?

Session #3 Questions for Industry Panelists

If the KPIs in a community, especially those in ESJ communities, tribal communities, and rural areas, consistently fail to meet your company standard or the industry standard, how could a Corrective Action Plan enforcement mechanism (like the one in GO 133-E) improve service quality or quality of service?

Session #3 Industry Panelists

AT&T

Josh Mathisen, Director, Regulatory;
Raymond P. Bolaños, Attorney

T-Mobile

Craig Sherry, Senior Manager, Field Engineering Operations;
Leon Bloomfield, Outside Regulatory Counsel

Verizon

Rommel Angeles, Associate Vice President, Network Engineering



Wireless Service Quality OIR Workshop #1

Session 3: Outage Metrics – Industry KPIs

June 25, 2026

Real-Time, AI-Enabled Networks—Not Static Regulation—Drive Performance

1

Network conditions change continuously—performance is managed using dynamic KPIs focused on a good customer experience

2

AI-enabled systems detect, reroute, and address issues in real time, reducing outage frequency and duration

3

Real-time network management minimizes customer impact as issues occur

4

Uniform performance standards apply across all communities—no differentiation in service quality

5

PUC-dictated network mandates (e.g., CAPs) are misplaced and would shift focus from real-time performance to after-the-fact penalties



THANK YOU

June 25, 2026



Wireless Service Quality Workshop

Session 3

Outage Metrics – Industry KPIs

T-Mobile – Committed to Building a Stronger, Smarter and
More Resilient Network

Presented to the California Public Utilities Commission | June 2026

How We Measure Service Quality



T-Mobile monitors its network 24x7, striving to maintain service quality for customers in every community we serve. These four KPIs are key to that process.

01

Network Availability

Percentage of time the network is operational and accessible to customers. Our goal: maximum uptime across all coverage areas, with immediate action on any degradation.

02

Call Drop Rate

Frequency at which established voice calls are unintentionally terminated. Tracked at network and cell site levels to identify and resolve trouble spots quickly.

03

Call Failure Rate

Percentage of attempted calls that fail to connect. A key indicator of network reliability and a primary signal for infrastructure investment decisions.

04

Call Set Up Time

Time from call initiation to connection established. A direct measure of network responsiveness that impacts every customer interaction, including 911 calls.

Our Commitment to Network Excellence



In a competitive marketplace, delivering the best service isn't just a goal — it's what drives every investment, every decision, and every response.

01

Every Outage is Important

T-Mobile strives to maintain service in the face of outages no matter the location — urban, rural, mountainous, coastal, inland, ESJ, tribal or elsewhere.

02

Best Service on the Best Network

T-Mobile's competitive drive requires continuously raising the quality bar. We invest relentlessly in infrastructure and innovation to lead the industry.

03

Growth Requires Serving Everyone

Our growth strategy depends on delivering excellence to all communities.

How T-Mobile Attacks Outages



In a highly competitive market, our drive to deliver the best service fuels constant innovation and a relentless sense of urgency in everything we do.

01

Proactive Detection

We don't wait for outages to happen. Advanced analytics and continuous health checks identify potential issues before they impact customers — stopping problems at the source.

02

24x7x365 Monitoring

Every network element is watched around the clock. Our Network Operations Center responds immediately to any anomaly — day or night, holiday or not, anywhere in the network.

03

Self-Organizing Network (SON)

SON modules automatically detect coverage gaps caused by a degraded site and direct neighboring cell sites to expand coverage — maintaining seamless connectivity without the need for manual intervention.

04

Network Resilience

We employ a host of strategies to protect network sites from outages caused by commercial power failures, backhaul outages, theft/vandalism — keeping customers connected when it matters most.

Resilience Toolbox



Appendix A – Cal OES Aggregated Data

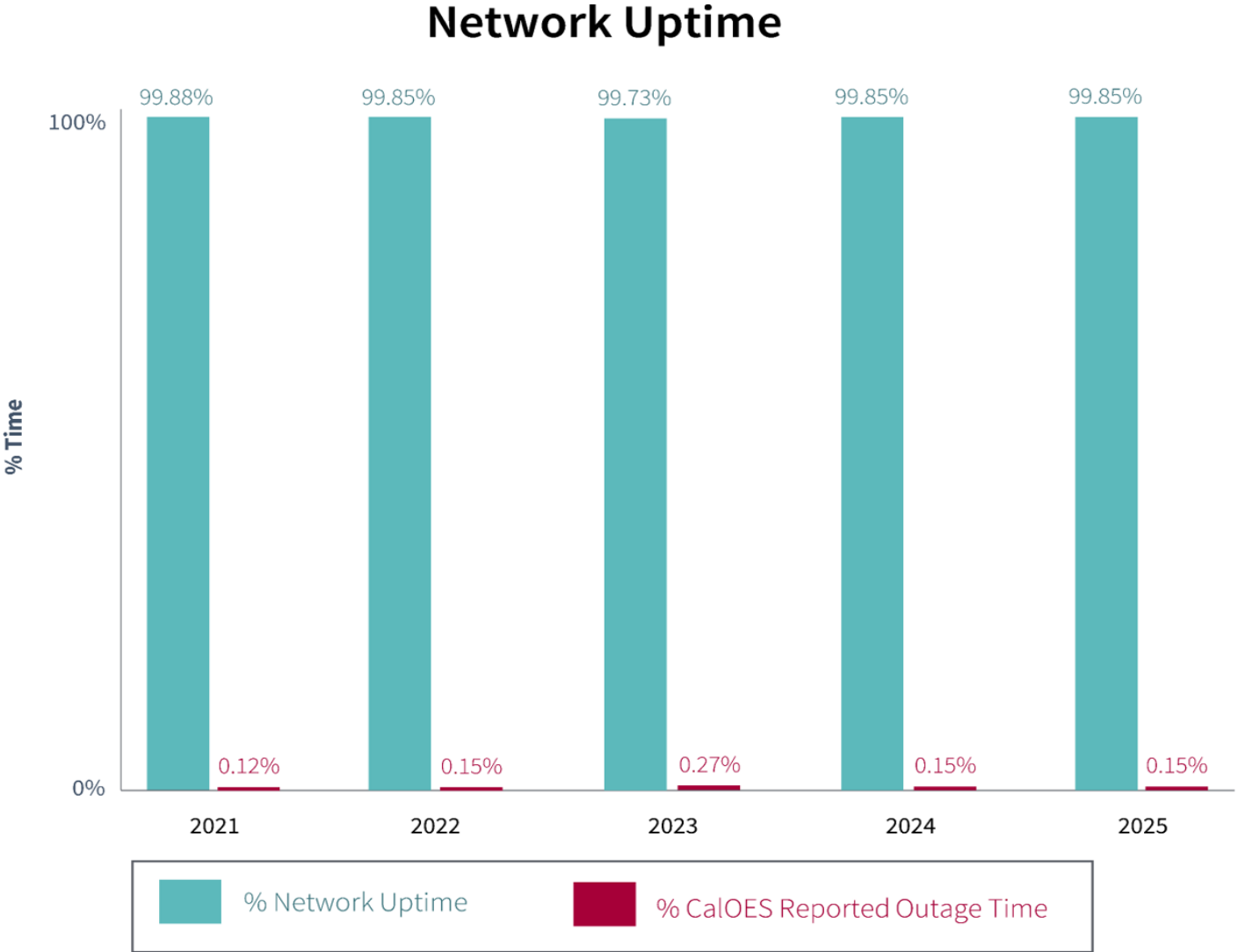
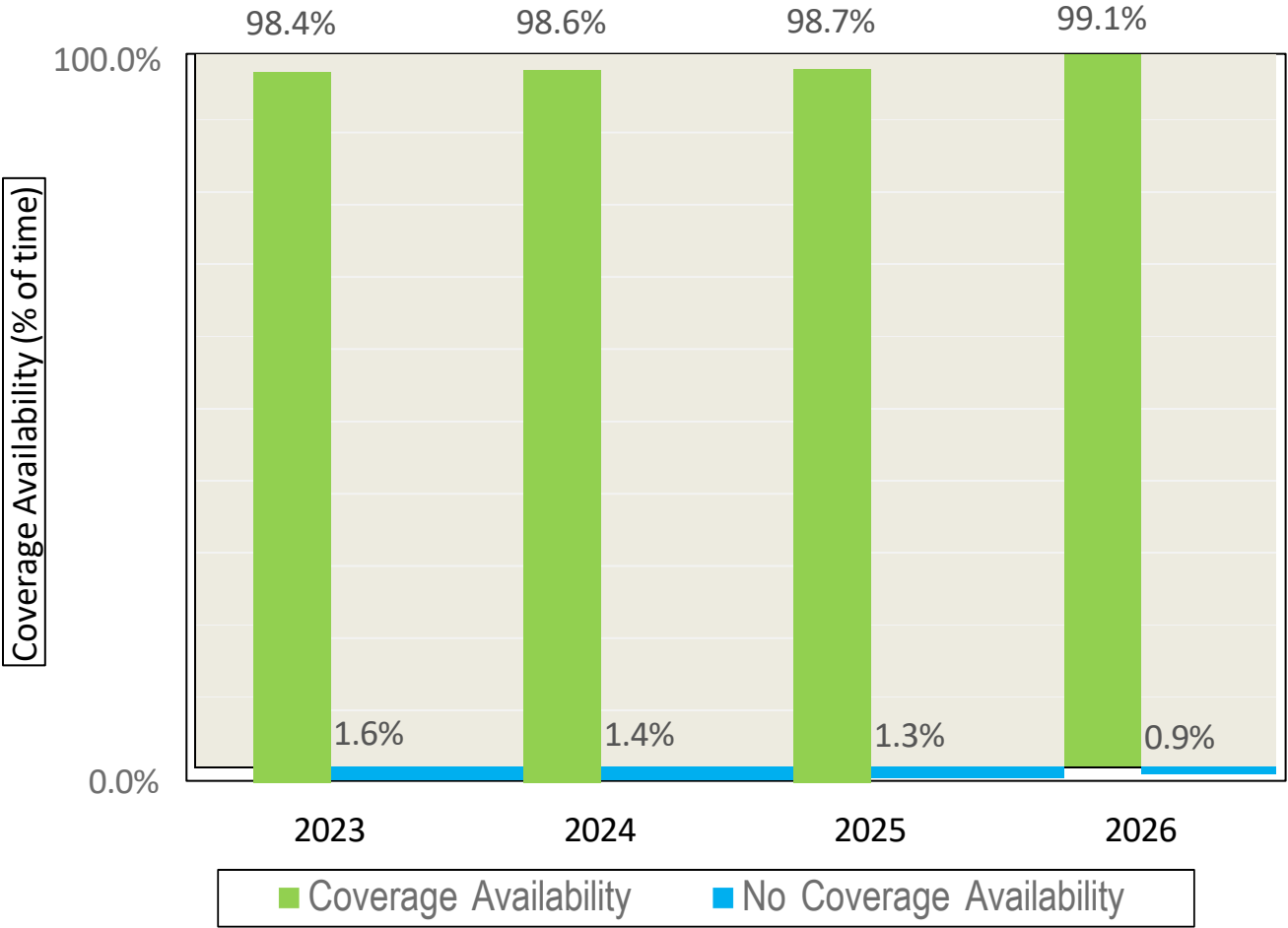


Chart is a copy of Attachment A from CTIA Motion to Submit Aggregated Data (June 22, 2026)

Appendix B – Opensignal Data



Average Provider Coverage Availability in California - Opensignal*



Opensignal describes this metric as a “... measure [of] what proportion of time people have a network connection, in the places they most commonly frequent — something often missed by traditional coverage metrics. “

* As reported by Opensignal in their publicly available January 2023 – 2026 Mobile Network Experience Reports.



Thank you!

Questions?

Q & A

Source:
Copyright 2009 Verizon

Session #3:

Outage Metrics – Industry KPIs

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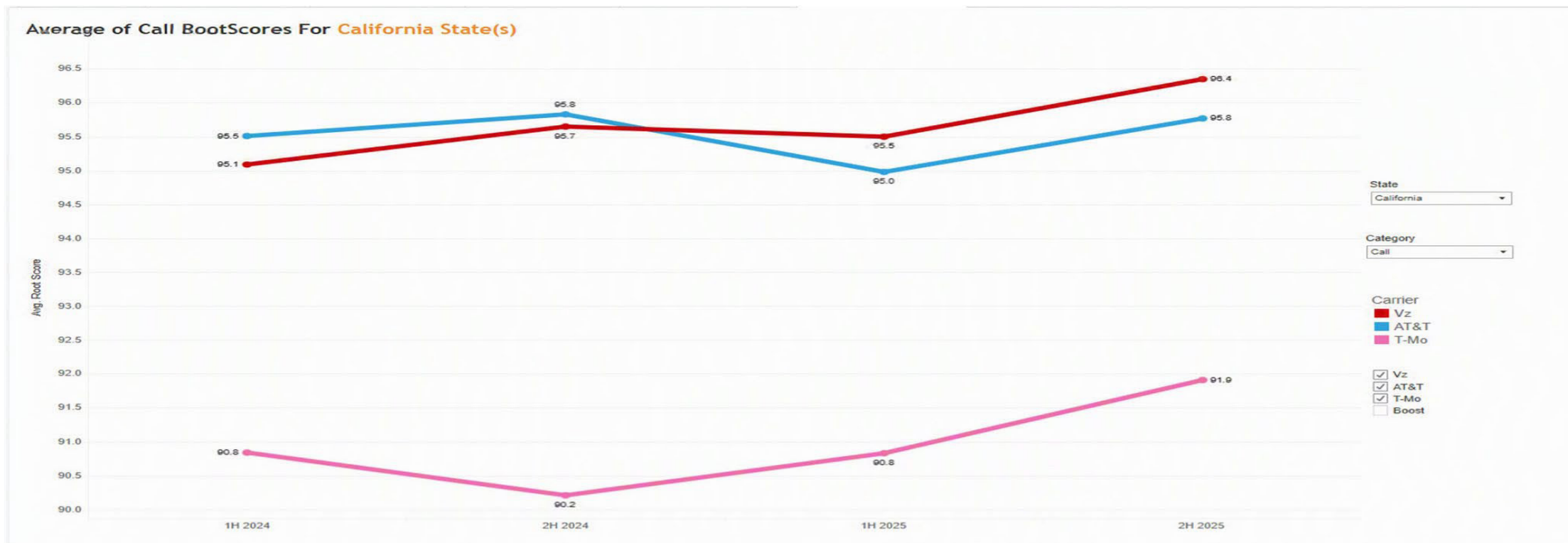
RootMetrics Shows Strong and Improving Wireless Voice Service Quality (2024-2025)

- Independent third-party industry standards for wireless voice services based on testing of networks (3 million tests in 2H 2025)
 - Blocked Calls
 - Call Drops
 - Call Set-Up Time



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RootMetrics Call Performance (2024-2025)



Verizon is a registered trademark of Verizon Wireless.

Verizon's Key Performance Indicators for Voice Services

- Cell Availability—Uptime of wireless network, measured by market
- Voice over LTE (“VoLTE”) Call Drop Rate
- VoLTE Call Ineffective Rate
- RTP Gap Duration Ratio Average (“GDRA”)

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Verizon's High Quality Wireless Voice Services

- Verizon's proactive monitoring and responsiveness do not vary by market.
- Verizon's performance and network investments are driven by customer demand and intense competition.
- Continued focus on network optimization.

verizon



verizon

Session #3 Questions for Advocacy Panelists

What are the challenges with wireless services that the general public experience? Do these challenges differ based on geography, particularly among ESJ communities, tribal communities, and rural communities?

Should the CPUC enforce KPI-driven standards and enforce them at a specific geographical level? How can the CPUC incorporate consideration for ESJ communities, tribal communities, and rural communities?

Session #3 Questions for Advocacy Panelists

Wireless service plays a crucial role in connecting 911 calls and transmitting emergency notifications.

If the KPIs in a community, especially those in ESJ areas, tribal lands, and rural areas, consistently fall below the industry standards, what enforcement mechanism can the CPUC implement to improve service quality?

Session #3 Advocacy Panelists

Cal Advocates

Josh Srago, Sr. Regulatory Analyst

Center of Accessible Technology

Paul Goodman, Legal Counsel

The Utility Reform Network

Regina Costa, Telecommunications Policy Director

Wireless Service Quality Outage Metrics

Josh Srago, Sr. Regulatory Analyst

June 25, 2026

Rulemaking (R.)26-02-027



The Public
ADVOCATES
OFFICE

Setting Metrics Baselines

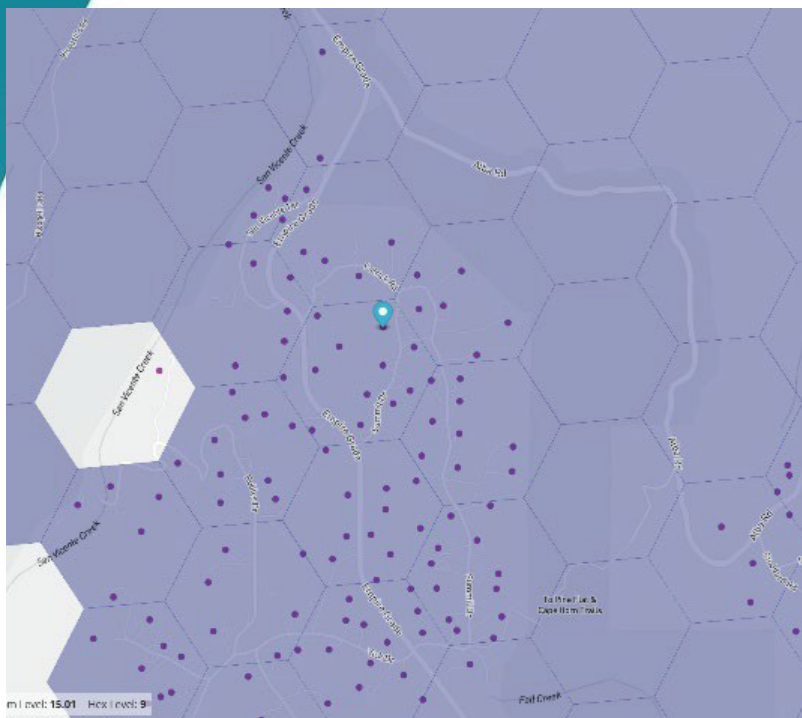
What does it mean to work 99% of the time?

Percentage	Yearly Downtime of a Network
99.9%	8 hours 45 min 57 sec
99.99%	52 min 35.7 sec
99.999%	5 min 15.6 sec
99.9999%	31.6 sec
99.99999%	3.2 sec

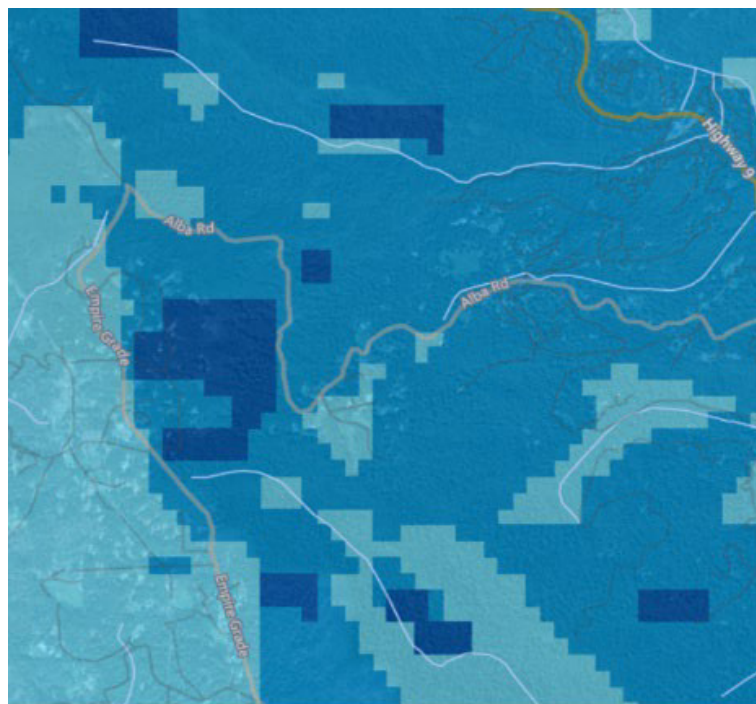
*A Five 9's metric is a common Service Level Measurement for network uptime

Metrics have value **ONLY** when there is a common baseline.

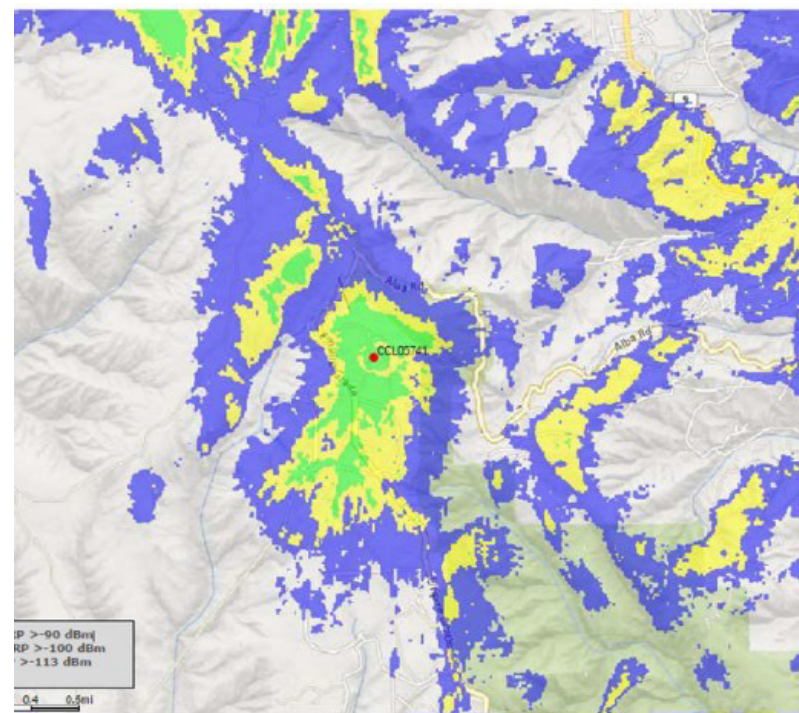
Wireless Maps Provide No Common Baseline



FCC Wireless Broadband
Map of Coverage

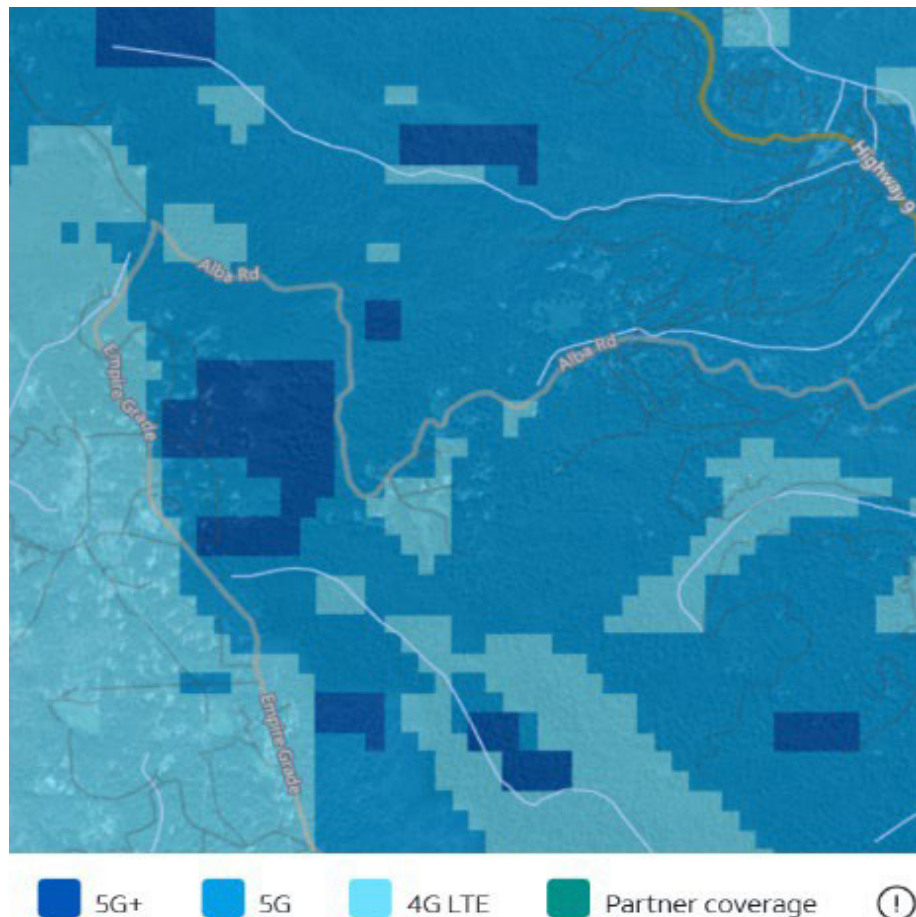


Carrier Map of Coverage

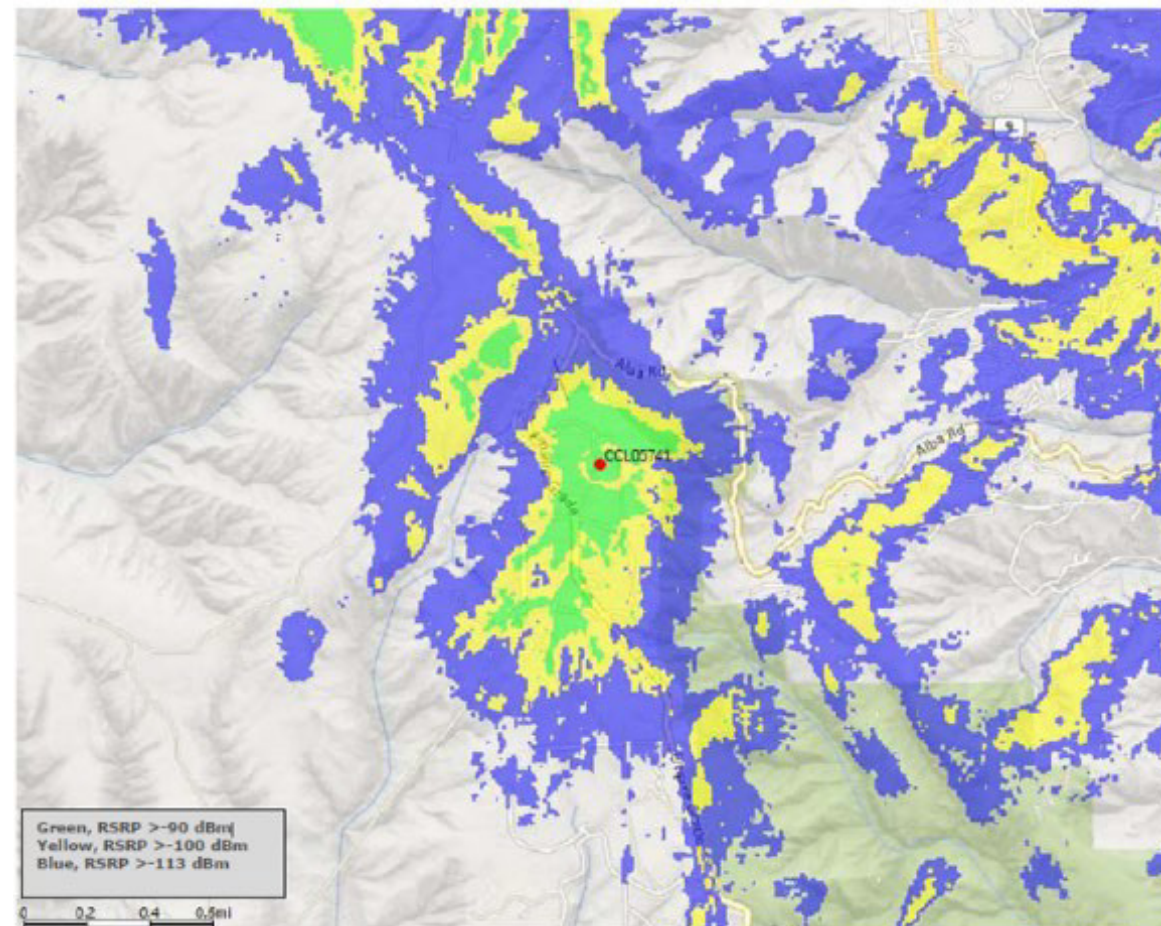


Carrier Map Submitted
with Permit Documents for
Proposed new Cell Site

Wireless Maps Provide No Common Baseline



Carrier Map of Coverage



Carrier Map Submitted with Permit Documents for
Proposed new Cell Site

All maps shown represent the same general area of Santa Cruz County, CA.

Signal Propagation Maps Establish the Baseline

- **Carriers already have these maps.**
 - Necessary for network planning
 - Necessary to determine possible network interference
- **Maps can be frequency band specific**
 - Focus on voice rather than data transmission frequencies.
- **Maps can be validated**
 - A third-party can recreate the results with the same equipment and parameters
- **Maps show the reality**
 - Based in science, not marketing
 - Address-level specificity
 - 4G or 5G coverage does not state a reasonable expectation for customers.
- **Customer Transparency**

Cal Advocates' Recommended Metrics

- Network Coverage measured in decibel-milliwatts
- Network Availability per cell site
- Cell Site Outage time (Community Isolation Outage)
- Cell Site Outage cause
- Voice Call Failures per cell site
- Voice Call Failure Rate per cell site
- Voice Call Drop per cell site
- Voice Call Drop Rate per cell site
- Network Congestion

Cal Advocates' Metric Considerations

- **Specificity is Key**
 - Statewide or Zip Code-Level metrics allow too much leeway
- **Averages or Median Performance can hide real customer experiences**
 - Using large areas or volume won't reveal the local performance

Metrics are NOT telling the carriers where to build or how the network must perform.

Cal Advocates' suggested metrics are about transparency and a reasonable expectation of service for consumers.

Session #3:

Outage Metrics—Industry KPIs



Paul Goodman
Center for Accessible Technology

Wireless Service Challenges

- What are the challenges with wireless services that the general public experience?
 - Provider marketing drives consumer expectations that are significantly different from consumer expectations about fixed voice services.
 - If you look at the big three providers' wireless maps, none of them guarantee that you can get service—even outdoors—anywhere in California.
 - Distance from retail locations
 - Distance from work crews/equipment

KPIs

- Using these industry KPIs as benchmarks to measure service quality, how can the CPUC maintain service quality?
 - KPIs are company-focused.
 - Net Promoter Score (comparison of percentage of customers that rate business 6 or lower to percentage of customers that rate business 9 or higher).
 - Customer satisfaction: number of customers that rated satisfaction 4-5 (out of 5) divided by total number of surveyed customers.
 - Churn rate
 - Customer lifetime value
 - “While there are dozens of metrics you could use to measure your business' success, a carefully targeted customer experience KPI can often tell you everything you need to know about the people who matter most to your business.”*
 - None of these KPIs tell us anything about service quality.
 - Potentially useful KPIs can be hard to measure (ex. call hand-off).

*Verizon.com, Finding the Right KPIs to Measure Customer Experience (Sept. 11, 2025), available at <https://www.verizon.com/business/resources/articles/s/finding-the-right-kpis-to-measure-customer-experience/> (last accessed June 23, 2026).

KPI Metrics

In addition to Cal Advocates' recommendations:

- Call volume per cell site (during Community Isolation Outages)
- Mean time to repair: Total time spent on repairs / Number of repair incidents
- Equitable distribution of new or updated technology
 - Annually report on network upgrades in its service territory, disaggregated by type of technology. Quarterly data, disaggregated by census block.
 - Annually report age and location of infrastructure currently in service in the field, broken down by three categories: under three years old, three to five years old, and over five years old.

KPIs—Geographical Level

- As previously noted, averages cover up a multitude of sins. Reporting has to be granular enough to allow the Commission to identify service quality “trouble areas.”
- Any outage occurrences that affect more than ten percent of served locations in a single zip code;
- Any customer location that has experienced more than one outage in a six-month period.
- Exemptions:
 - Limit exemptions for “cable cuts” to cut, stolen, or vandalized copper or coaxial cable infrastructure;”
 - Eliminate exemption to areas that have not experienced theft or vandalism of cable within the past six months.

Fine Mechanism

- Fines are a penalty meant to incentivize providers' failure to meet minimum standards of service quality.
- Refunds/customer credits are meant to make customers whole when they fail to receive adequate customer service.
- The Commission's Wireless Service Quality standards should require both general fund fines and automatic customer credits.

Workshop Session # 3 – Outage Metrics

Rulemaking 26-02-017

June 25, 2026



Call Quality Metrics Are Important

- TURN supports Cal Advocates' position regarding the importance of call quality metrics. Poor service quality is not limited to the complete lack of service for a community.
- For example, at the April 18, 2023 Public Participation Hearing (R.22-03-016), a customer located in Castro Valley (Alameda County) described the poor cellular service provided by AT&T to approximately 500 out of 5,000 households in his area.
- Even though a significant number of customers have poor or nonexistent service, it is not clear that this would be reported as a community isolation outage incident, and therefore would not be included in outage data provided to the Commission.
- The fact that 500 households are reported to have very limited cell service poses a significant public safety risk, particularly in an area like Castro Valley, in a major seismic zone and at high risk for wildfires. The Commission should be aware of these types of situations.
- These types of outages should be reported, carriers should be required to provide customers who call to report a problem with their service to the Commission.

Service Quality Data Analysis

- When the Commission staff analyzes service quality data, it should consider the data from G.O. 133x reporting in conjunction with customer contacts received by CAB regarding poor service.
- This type of analysis would allow the Commission to understand if there are disparities in service quality depending on different demographic characteristics.
- TURN agrees with SBUA that small businesses have unique public safety obligations, and that small business outage data should be disaggregated, if possible.

Q & A

Closing Remarks

Commissioner Darcie L. Houck