Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matters of	)	
	)	
911 Governance and Accountability	)	PS Docket No. 14-193
	)	
Improving 911 Reliability	)	PS Docket No. 13-75

COMMENTS OF THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

The Washington Utilities and Transportation Commission (UTC) respectfully submits the following comments[1] in response to the Policy Statement and Notice of Proposed Rulemaking (NPRM) issued by the Federal Communications Commission ("Commission") in the above-captioned proceedings.[2] Pursuant to the NPRM, the Commission seeks comment on core principles for ensuring safe, reliable and resilient 911 service, as well as collaborative efforts with state regulatory commissions and local governmental authorities on matters concerning 911 service performance. The Commission also proposes specific rule changes to address observed failures in the nation's public safety structure demonstrated by recent 911 outages, additional mechanisms designed to ensure that its 911 governance structure keeps pace with evolving technologies and new reliability challenges, and ensure that all 911 service providers remain fully accountable for their role in assuring public safety.

[1]The UTC has authority to "participate in proceedings before federal administrative agencies in which there is at issue the authority, rates or practices for transportation or utility services affecting the interests of the State of Washington, its businesses and general public." Wash. Rev. Code § 80.01.075.
[2]See Policy Statement and Notice of Proposed Rulemaking, *In the matter of 911 Governance and Accountability, PS Docket No. 14-193; Improving 911 Reliability, PS Docket No. 13-75,* released November 21, 2014, FCC 14-186 (911 Governance and Accountability NPRM).

As the state regulatory agency with authority to oversee the primary entities responsible for providing 911 services, the UTC supports the Commission's effort to ensure 911 reliability across increasingly different platforms and technologies. The UTC supports the Commission's recognition of the need for a strong federal-state partnership overseeing the nation's 911 system. The UTC also shares the Commission's objective to preserve the ability of 911 callers to reach public safety resources despite marketplace and technological changes that are impacting the provision of 911 service. .

As we explain in our comments below, the UTC agrees with the Commission's general premise that firmer federal guidelines and rule changes would be useful and appropriate in light of structural, technological, and marketplace changes that increase the complexity and potential points of failure in the provision of 911 service. The UTC supports such measures as long as they do not disturb or work to undermine efforts at the state and local levels where 911 oversight has historically been conducted. The UTC is vigilant and engaged on 911 issues and believes that federal and state coordination of regulatory information and policy development promotes the shared goals of reliable, resilient, and survivable emergency networks nationwide.

I. Nothing in the NPRM Should Act or be Construed to Impede State Commission and Local Governmental Authority Over Reliable 911 Service.

The Commission expressly acknowledges that governance of 911 is presently shared among state, local and federal authorities.[3] It also notes that the local structure and provision of 911 service is predominantly a matter of state law, including oversight of the provision of 911 service by incumbent telephone companies pursuant to tariff and regulations established by state commissions.[4] In its *911 Reliability Order*, the Commission specifically recognized there is no fine line distinguishing federal from state authority with respect to 911 service and emphasized that none of its actions taken to address 911 reliability should diminish or impede state and local oversight of the provision of 911 service; rather, the roles of federal and state authorities should

[3] 911 Governance and Accountability NPRM, ¶28.
[4] *Id.*

be complementary, in the form of a partnership, as opposed to regulatory silos with little interaction and coordination.[5] The UTC agrees.

Governance of 911 in Washington state is shared by a number of state and local governmental authorities. The UTC has jurisdiction over the rates, services, facilities and practices of telecommunications companies operating within the state.[6] Local telephone companies (LECs) that provide local exchange telecommunication service pursuant to Washington Administrative Code (WAC) 480-120-021 are required to provide access to emergency 911 and Enhanced 911 (E911) under the definition of "basic service" in WAC 480-120-021 and RCW 80.36.630(1)(v) ("basic telecommunications service"). Additionally, the UTC has adopted rules[7] pursuant to its authority under RCW 80.01.040 that set forth obligations of companies relating to 911 service, safety and standards. The UTC also regulates service quality, including ensuring public safety, as part of its fundamental role in protecting consumers.

For 911 services, telecommunications companies in Washington State must meet certain network performance standards, including a blocking standard for E911 dedicated interoffice trunk facilities of less than 1 percent during the average busy-hour of the average busy season. With respect to service outages, the UTC requires that telecommunications companies take steps to minimize the effects of service failures, including failures affecting E911 service, and report their performance under *WAC 480-120-412.* The UTC's reporting requirements include:

- Notification to the UTC and any Public Safety Answering Point (or "PSAP") when a company receives notice of or detects a major outage. *WAC 480-120-412(2).*
- Notification to county E911 coordinator and state emergency management authorities when a major outage affects any emergency response facility, and, if requested, a) coordination with state emergency management of restoration efforts, and b) daily reporting to the UTC of restoration progress until full network recovery. *WAC 480-120-412(3).*

[5] *911 Reliability Order*, 28 FCC Rcd at 17490-91, ¶41.
[6] RCW 80.01.040 and RCW 80.36.080.
[7] WAC 480-120.

- Provision of timely information to the public, public officials and media during a major outage, including time, cause, location, scope, and anticipated duration. *WAC 480-120-412(5).*

In addition to the role of the UTC, Washington established by law a State E911 Coordination Office, headed by a State Enhanced 911 Coordinator in the Emergency Management Division (EMD) of the Washington Military Department.[8] The State E911 Coordinator is responsible for the coordination and facilitation of the implementation and operation of E911 emergency communications systems throughout the state and support for the state's Enhanced 911 Advisory Committee. The State E911 Coordinator also works directly with the E911 County Coordinators for each of Washington's 39 counties that oversee the PSAPs within their respective jurisdictions.

Collectively, the oversight of various elements of Washington's 911 system has worked well through shared responsibilities and coordinated efforts by individuals at the UTC, county-level PSAP entities, and the State Enhanced 911 Coordinator Office at EMD, that effectively serve as the state and local level governance structure.[9] Historically, these efforts have worked well to assure safe and reliable 911 service in Washington but may face unique new challenges as next-generation 911 technologies are increasingly deployed. Therefore, as the Commission considers a number of potential rule changes and governance proposals in the NPRM, the UTC supports federal guidance on 911 reliability and resiliency, but urges the Commission to focus on measures that are complementary to, and do not limit or restrict, state and local government efforts. Although it is true that technological and marketplace changes are altering the manner in which some components of 911 service are handled, including increasing reliance on network components and technology that are multi-state in nature, the vast majority of 911 calls originate and terminate within or to nearby PSAPs within each state and county and are jurisdictionally intrastate in nature. Accordingly, federal efforts should be dedicated to measures that assist, or complement, state and local governance efforts, rather than act to supersede them.[10]

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[8] RCW 38.52.005.

[9] Funding for 911 in Washington consists of county and state 911 fees. The UTC reviews and approve the state portion of 911 fees based on recommendations from EMD and the state's E911 Advisory Committee.

[10] See testimony of David W. Danner (Chairman of the Washington Utilities and Transportation Commission) at the Commission Open Meeting regarding the *Multistate 911 Outage Report.* October 17, 2014 Open Commission

II. The Commission's Policy Statement Appropriately Recognizes the Need for Greater Transparency and Information Sharing with States.

The Commission's Policy Statement appropriately acknowledges the vital role that state and local governments play in overseeing deployment and operation of emergency communications infrastructure and programs, including reliable 911 service. As the nation transitions to new 911 architectures and specialized providers, the Policy Statement properly asserts that such structural developments should have the necessary redundancy and reliability safeguards, along with the appropriate governance mechanisms, to maximize reliability and protect public safety. Additionally, the Policy Statement properly recognizes that significant changes in 911 service should be coordinated in a transparent manner between the Commission and state and local authorities and that the Commission will act cooperatively with state and local governments on any changes to 911 services that create real or perceived gaps in the delivery of reliable and resilient 911 services.

As we explain below in response to specific proposed rule changes in the NPRM, the UTC welcomes and supports a variety of measures the Commission is considering that can or will act to improve federal, state, and local technical understanding of 911 operational and network configurations in an evolving marketplace. In particular, the UTC supports national measures that would enable and provide meaningful and timely insight to 911 outages by all federal, state, and local officials involved with 911 oversight. Similarly, the UTC strongly supports strengthened reporting obligations, state access to the Commission's outage reporting databases, expanded certification requirements, and other measures intended to facilitate Commission and state commission understanding of the nation's 911 infrastructure.

Of all the potential measures contemplated by the Commission in the NPRM the UTC believes it is critical that states be provided secure and confidential access to the Commission's Network Outage Reporting System (NORS) and Disaster Information Reporting System

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Meeting, Video at 93:10-93:50, http://www.fcc.gov/events/open-commission-meeting-october-2014. Additionally, on January 15, 2015, the Commission appointed Commissioner Phil Jones to the Task Force on Optimal Public Safety Answering Point Architecture (TFOPA), FCC DA 15-58.

(DIRS).[11] The reports and data submitted by responding 911 service providers contains detailed network and operational information. Immediate access to this critical information would greatly improve the ability of state and local government officials to understand comprehensively the root causes and effects of major network outages, regardless of origin. NARUC's Board of Directors passed resolution TC-2 on February 18, 2015, that requests the Commission to act expeditiously by granting a petition filed by the California Public Utilities Commission (CPUC) to allow states direct access to NORS for state-specific data in the system's database, subject to appropriate safeguards for confidential information. The UTC supports that resolution and encourages the Commission to grant the CPUC's petition.

III. The UTC Supports Revisions to Rule 12.4 that Improve Transparency, Expand Reporting and Certification Requirements, and Require Heightened Network Reliability Practices.

The Commission adopted Rule 12.4 in the *911 Reliability Order* as a consequence of a series of service outages that affected 911 services. The rule requires major providers to take reasonable measures to provide reliable 911 service for circuit diversity, central-office backup power, and diverse network monitoring.[12] It also contains a number of reporting requirements that providers certify annually whether they have implemented specified best practices or alternative measures for each applicable technological requirement of the rule.[13] Rule 12.4 currently applies to those 911 service providers that provide specified 911 capabilities, or the functional equivalent, directly to a PSAP (typically meaning those entities that provide 911 services pursuant to a contractual agreement with a PSAP or emergency authority).[14] As the Commission notes, the recently experienced multi-state 911 outage highlights both the inadequacies of relationships between 911 service providers and their sub-contractors or vendors and the increased complexities associated with identifying problems and restoring service due to inadequate communication.

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[11] FCC Network Outage Reporting System (NORS) http://transition.fcc.gov/pshs/services/cip/nors/nors.html , FCC Disaster Information Reporting System (DIRS) http://transition.fcc.gov/pshs/services/cip/dirs/dirs.html.
[12] 47 C.F.R. § 12.4(b).
[13] 47 C.F.R. § 12.4(c).
[14] 47 C.F.R. § 12.4(a)(4).

As discussed below, and in light of Washington's experience with the April 2014 multi-state 911 outage,[15] the UTC supports a number of the Commission's proposed revisions to Rule 12.4 as necessary means to improve accountability in the delivery of safe and reliable 911 services.

a. Entities Subject to Rule 12.4

The Commission seeks comment on revisions to Rule 12.4 that would expand the scope of entities covered by the rule to include all entities that provide 911, E911, or Next Generation 911 (NG911) capabilities, such as call routing, automatic location information (ALI), automatic number identification (ANI), location information servers (LIS), and text-to-911, regardless of whether they provide such capabilities under a direct contractual relationship with a PSAP or emergency authority. The proposed change is intended to address 911 network architectures where multiple service providers or sub-contractors provide call routing and ALI/ANI capabilities. The proposed change would not mitigate the obligations of those 911 service providers already subject to Rule 12.4, rather, the rule would be expanded to cover additional 911 service providers in light of evolving marketplace fragmentation of the delivery of 911 services.

The UTC supports expanded certification requirements for all entities[16] involved with critical aspects of safe and reliable 911 service. As the Commission is aware, delivery of 911 services has evolved as niche entities have increasingly been engaged by traditional 911 service providers to assume a variety of network and service delivery functionalities. Although this evolution may well be appropriate to streamline and achieve economies in the provision of such 911 service delivery capabilities, this change also reflects a more diverse and complex condition that warrants a greater level of oversight. Many of the emerging 911 specialized providers merely serve as contractors or sub-agents to other traditional 911 service providers with overall contractual responsibility to public safety entities and the UTC does not believe such 911 service providers should escape scrutiny and responsible oversight given the importance of safe and reliable 911 services. Expanding registration and certification requirements to such entities is a

[15] UTC Docket UT-140597, Investigation into CenturyLink's Statewide 911 Service Outage on April 10, 2014.
[16] NPRM (FCC 14-186), Appendix A, Modifications to Rule 12.4 (a) (4) Defining a Covered 911 Service Provider.

reasonable consequence of their emerging role that ensures each entity involved with 911 service delivery affirmatively certifies compliance with federal requirements.

Additionally, as part of the cooperative framework with state and local partners the Commission seeks to maintain, the UTC suggests the proposed expanded certification requirements of Rule 12.4 be modified to require that all covered entities that submit annual certification, compliance, or audit reports, should also be required to simultaneously submit such information to designated state governance officials, such as the UTC and the Washington State E911 Coordinator's Office, that are actively involved or have some oversight responsibilities with respect to reliable 911 service delivery at the state level. Access to such information by state officials would greatly assist in understanding and tracking marketplace developments affecting 911 service delivery within the scope of their jurisdictions. State access could also greatly assist officials during times of emergency, like the April 2014 multi-state outage, in understanding and interacting with such entities as events unfold. The UTC urges the Commission to modify the certification and reporting requirements of Rule 12.4 by requiring covered 911 service providers to submit certification and compliance information and reports to the Commission's state partners.

b. Expanding Network Reliability Practices

The Commission seeks comment on whether additional specific network reliability practices such as diversity audits, implementation of physically diverse aggregation points, establishment of appropriate alarms, and load-balancing requirements should be incorporated into Rule 12.4. In particular, the Commission asks whether the certification requirements for all covered 911 service providers should include a demonstration regarding the extent to which a service provider's IP-based 911 architecture is geographically distributed, load-balanced, and capable of automatic reroutes to backup equipment in the event of a hardware, network, software, or database failure. The Commission also seeks input on whether the network monitoring component of the existing rule should cover not just the physical diversity of monitoring facilities, but also the proper prioritization of critical network alarms.

The UTC supports expanding the range of network reliability practices that 911 service providers must address through the Commission's certification requirements. Each major outage over the past few years has demonstrated that the complexities of 911 service delivery have broadened with more identifiable potential points of failure or network monitoring inadequacies. The UTC shares the Commission's desire to identify such critical areas and require positive confirmation of enhanced network reliability practices by all providers. Diversity, alarming and load balancing are vital measures that, when implemented and maintained properly, can both prevent and mitigate 911 service performance outages.

With respect to load balancing, the UTC believes the Commission's proposal to require 911 service providers to dynamically distribute call volumes among multiple, active databases or call-processing facilities rather than be concentrated in one active location, is a rational and appropriate technical requirement. However, reflecting on our recent experience with the April 2014 911 service outage, the UTC has two concerns.

First, the UTC respectfully suggests the Commission's new requirement should be modified to require load balancing separately for 911 call volumes in each state. The traditional providers of 911 service in each state have contractual and regulatory obligation within each jurisdiction to provide safe and reliable 911 service regardless of network configuration. The UTC is concerned that 911 service providers may satisfy the requirement by virtue of some national or regional measure which could continue to leave individual states with significant exposure to unbalanced 911 call volume conditions unless the new requirement is modified.

Secondly, the UTC recommends the Commission make it clear that 911 service providers required to meet the new requirements for dynamically distributing 911 call volumes may not interpret the new rule as allowing load balancing by having all or the majority of 911 calls in a particular state directed to a primary Emergency Communications Management Center (ECMC) with "dynamic" roll-over to a secondary ECMC. Dynamic distribution should mean that all 911 call volumes are constantly and consistently distributed on a real-time basis between multiple databases and call-processing facilities.

c. Sharing of Information and Situational Awareness

The Commission seeks comment on the whether Rule 12.4 should be modified to require certification of covered 911 service providers for sharing information and situational awareness during 911 service disruptions. In particular, the Commission proposes to amend its certification requirements to indicate whether a covered 911 service provider has adequate processes in place to notify PSAPs of an outage within the timeframes specified in Part 4 of the Commission's rules and whether covered 911 service providers should confirm PSAP contact information and test notification plans periodically.

The UTC agrees that covered 911 service providers must be required to maintain up to date distribution and contact lists to be utilized during and after 911 service outages. Dispensing information about outages as soon as possible to all potentially affected service areas and responsible public safety officials is a crucial aspect of minimizing the effect of such disruptions. All manner of communication should be used to timely and effectively notify officials of outages so that the scope of outage conditions can be determined and officials can implement alternative backup plans and arrangements. Although the UTC supports the Commission's objective to improve information sharing and situational awareness conditions, we believe the proposed modifications to Rule 12.4 do not go far enough. Although 911 service providers should be required to maintain and use multiple means to disseminate information regarding outages, the UTC remains concerned that covered 911 service providers may rely on passive methods such as email and SMS messaging as a primary means to alert officials to outages rather than affirmative contact by telephone or other more effective means. Covered 911 service providers must be charged with and held responsible for vigorously and actively communicating vital 911 outage information to public safety entities on a real-time basis. Although providers should use email and SMS messaging, the UTC believes providers bear an overriding responsibility to communicate proactively and effectively, which may require using other methods.

IV. Conclusion

The Commission, state, and local governance organizations all play a vital role in overseeing the nation's goal of maintaining safe, reliable and resilient 911 services. The UTC

believes the recent response and collaborative efforts between Commission and UTC personnel concerning the April 2014 multi-state 911 outage exemplify meaningful federal – state coordination on such public safety matters, a model the Commission should reinforce by virtue of many of the proposals set forth in the NPRM. The UTC commits to continuing to work with the Commission in developing practical but essential rules and industry practices concerning 911 services.

Respectfully submitted this 17th day of March, 2015.

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