

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
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911 Governance and Accountability)	PS Docket No. 14-193
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Improving 911 Reliability)	PS Docket No. 13-75
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To: The Commission

**COMMENTS OF
THE BOULDER REGIONAL EMERGENCY TELEPHONE SERVICE AUTHORITY
ON POLICY STATEMENT AND NOTICE OF PROPOSED RULEMAKING**

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Summary

The Commission should not seek to expand its authority over 9-1-1. PSAP processes and operations are closely integrated with the public safety and emergency response systems. Changes in 9-1-1 service and PSAP operations the Commission is pursuing have the potential to significantly and adversely impact public safety response and emergency operations.

That the Commission would pursue changes in PSAP operations which would adversely impact public safety is not surprising, given that the Commission's proceedings are dominated by providers and others who lack experience in overall public safety operations and budgeting. Only a handful of parties with public safety experience regularly participate in Commission proceedings regarding 9-1-1. This is because of their level of participation at the state level, and limited resources.

The opposite conditions exist at the state level, where the public safety community participates actively to improve public safety and emergency operations. It is the providers which do not participate actively at the state level.

States are in a much better position to regulate 9-1-1 service to best meet the public interest and needs of their constituents. The implementation and configuration of 9-1-1 services which will best serve the public interest may vary from state-to-state. It is more prudent for the states to regulate 9-1-1 service than for the Commission to do so, because of the states' greater familiarity with the characteristics and considerations, and the greater participation of public safety entities at the state level.

Not only is it more prudent for the states to exercise jurisdiction over 9-1-1 service, but 9-1-1 calls are intrastate calls subject to state jurisdiction. While nomadic VoIP service may not

yet include automatic location information subjecting it to state jurisdiction, it is time for the Commission to impose requirements for development of such capability, just as it has required development and improvement of such capabilities for wireless and text-to-911 services.

The Commission involvement in regulation of 9-1-1 service should be through a Federal-State Joint Board. The Commission should require that new services be 9-1-1 compliant. The Commission should also serve as a clearinghouse for public information regarding 9-1-1, and for private information bearing on 9-1-1 security.

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The Boulder Emergency Telephone Service Authority (“BRETSA”), by its attorney, hereby submits its Comments on the Commission’s February 21, 2014 Third Further Notice of Proposed Rulemaking in the above-referenced Docket (“NPRM”).

BRETSA is a Colorado 9-1-1 Authority which establishes, collects and distributes the Colorado Emergency Telephone Surcharge to fund 9-1-1 service in Boulder County, Colorado. The BRETSA Board includes the Boulder County Sheriff, the City of Boulder Police Chief, representatives of the Boulder County Firefighters Association and the City of Longmont Division of Public Safety. The fifth seat of the Board is filled by representatives of the smaller cities and towns in Boulder County, Colorado on a rotating basis. These Comments are thus intended to represent the perspective of the entity responsible for funding 9-1-1 operations, *and* of the agencies and authorities responsible for PSAP operations and overall public safety services and budgeting.

I. The Commission Is Not Writing On A Blank Slate.

BRETSA urges the Commission, to keep in mind that it is not writing on a blank slate. Public Safety Answering Points (“PSAPs”) procedures and operations have been developed and refined through decades of experience as an integral part of a highly-efficient public safety and emergency response system. Because PSAP operations are an integrated element of the overall public safety operations, changes in PSAP operations may impact First Responder operations as well. Proposals to change PSAP functions and operations should not be so blithely made by parties lacking experience in overall public safety budgeting and response, as such changes could reduce the efficiency and effectiveness of the emergency response system.

BRETSA will provide just three examples of current proposals which would adversely impact the efficacy of emergency response: (i) proposals to make PSAPs command and control centers, (ii) proposals to provide medical records to PSAPs, and (iii) proposals to consolidate PSAPs to as few as one per state. BRETSA has previously addressed proposals to transmit photos and videos to PSAPs. *See* December 12, 2011 Joint Comments of the Boulder Regional Emergency Telephone Service Authority and the Colorado 9-1-1 Task Force, on the September 22, 2011 Notice of Proposed Rulemaking in FCC Docket No. 11-153, pp 13-39 (Available at <http://apps.fcc.gov/ecfs/comment/view?id=6016877846> last accessed March 21, 2015.)

A. PSAPs As Command and Control Centers.

In his comments at the inaugural meeting of the Task Force on PSAP Optimization (“TFOPA”), Bureau Chief Simpson envisioned PSAPs becoming “command and control centers” because they will purportedly have better situational awareness of incidents. This vision lacks the perspective of the PSAP’s role in the public safety ecosystem in three important ways:

(i) the qualifications and capabilities of PSAP calltakers/dispatchers, (ii) the role of the PSAP versus the role of First Responders, and (iii) the amount of time a dispatcher has on a call.¹

1. Qualifications and Capabilities of PSAP Personnel.

PSAP personnel are hired for their multitasking ability, their ability to handle the emotional strains of the job, and their communications skills. They are not hired based upon First Responder experience that would qualify them to exercise command authority, and indeed relatively few dispatchers have First Responder experience.² Dispatchers are often high school graduates, and dispatch positions generally offer moderate pay.

Dispatchers are trained to follow established processes and protocols for handling and dispatching calls. The discretion they exercise falls within the scope of their responsibility to answer calls and elicit information necessary to dispatch First Responders or direct callers to take other action, and to dispatch and provide relevant information to First Responders.

An example protocol-driven PSAP operations is Emergency Medical Dispatch (“EMD”); the instruction of callers in provision of First Aid to someone who has suffered injuries. When a PSAP implements EMD, it typically purchases an EMD system in either a card format, or a computerized format which may integrate with the CAD system. The EMD system leads dispatcher through a series of questions in a decision-tree to determine what First Aid is

¹ In larger PSAPs, the responsibility for answering 9-1-1 calls (“calltaking”) and dispatching First Responders are separated. Although PSAP personnel will be trained both as calltakers and as dispatchers, they will generally work in only one of those capacities on any shift. The calltaker will interview the caller, gather the relevant information, and enter that information in an incident file in the Computer Aided Dispatch (“CAD”) system. A dispatcher will dispatch First Responders based upon the information in the CAD incident file. Some PSAPs find it more efficient, separate PSAP roles in this manner as personnel can focus on the specific roles assigned, and callers are less likely to overhear information relayed to First Responders. In the vast majority of PSAPs, however, personnel simultaneously perform both calltaking and dispatch functions. For the purpose of these Comments, the term “dispatcher” will be used to refer to PSAP personnel whether they perform calltaking, dispatching or both functions.

² BRETSA recognizes that many view dispatchers *as* First Responders. It is not BRETSA’s intent to denigrate the role or the importance of dispatchers in distinguishing between dispatchers and First Responders. The distinction is made solely to facilitate discussion of the important differences between the qualifications, training and experience of dispatchers, and that of law officers, firefighters and paramedics.

appropriate, and then to guide the dispatcher through the First Aid instructions to be given over the telephone.

EMD systems are developed with the expertise of medical and First Aid professionals, and are subject to updating as medical knowledge expands, and experience is gained with the EMD systems across subscribing jurisdictions. Local public safety agencies which operate the PSAPs retain local doctors to assist in their selection of EMD systems, and/or to review and modify the diagnostic questions or first aid instructions as they deem appropriate for the jurisdiction. The dispatcher's role is not to "freelance" and take it on themselves to diagnose the subject and provide First Aid instructions, but to faithfully follow and apply the EMD system.

Commission officials and commenters in this proceeding are likely to be more highly educated than the average dispatcher, have years of experience in their field and/or command, management or leadership training and experience. It is easy and natural for them to envision themselves in the role of dispatchers, but exercising similar levels of discretion and leadership even on a call-by-call basis as they do in their current professions. However while PSAP personnel exercise judgment and discretion within the scope of their positions, dispatchers are neither qualified nor expected to exercise command and control over First Responders.

2. Roles of PSAP Personnel and First Responders.

The role of the PSAP with respect to a 9-1-1 call is to determine the location and nature of an incident, and dispatch the complement of First Responder units based upon the location and nature of the emergency and the business rules of the agency(s). For example, the business rules of most law agencies call for dispatch of two law officers to domestic disturbances, because these types of incidents have proven so dangerous to responding officers.

The role of First Responders is to (i) travel as quickly as safely possible to the scene of an incident, (ii) make an on-scene assessment of the incident, and (iii) interact with victims,

perpetrators, witnesses or others at the scene as appropriate to address the emergency. It is the First Responders who engage with the people or the circumstances on-scene who most directly impact outcomes.

Once First Responders are at the scene of an incident, and for law officers on patrol; the First Responders operate autonomously based upon their five-sense, 360 degree, situational awareness and their engagement with individuals on-scene. Command and control for firefighters responding to an incident is provided by an on-scene Fire Chief, Assistant Fire Chief, Battalion Commander, or other firefighter in a leadership role based upon training and experience. In the case of multiple law officers responding to a major incident or event requiring greater coordination of resources, command and control is exercised by an incident commander based upon training and experience.

While the primary role of the PSAP is to get the correct First Responders to the correct location to be able to impact the outcome of an incident, PSAPs may be able to provide additional information to support First Responders. The additional information may be distilled from the information provided by a caller, drawn from CAD records, agency records and adjacent agencies records available through CopLink, FBI and state bureau of investigation records, and other databases as well as the dispatcher's "local knowledge" gained as a resident of the area and as a dispatcher.

Dispatchers lack the training and experience as First Responders, as well as the on-scene situational awareness, to exercise command and control. Similarly, First Responder radio systems are designed to allow the breakout of tactical groups, to permit units responding to a common incident or involved in a common operation to communicate directly rather than going

through the PSAP/dispatcher, or having their communications interfere with dispatch communications generally.

3. PSAP Time On A Call.

PSAPs typically answer a 9-1-1 call, obtain the information necessary to dispatch First Responders, and dispatch units according to the business rules of the agency. The dispatcher may terminate the 9-1-1 call before First Responders arrive on scene unless (i) the dispatcher is providing EMD, or (ii) the caller continues to provide information, such as with respect to a developing or ongoing incident. The dispatcher needs to terminate the call when feasible in order to be available to take other calls.

With the market penetration of wireless services, it is not uncommon for PSAPs to receive over 100 separate 9-1-1 calls from a single traffic accident on a major highway. With a 2010 Boulder County population of 294,567, the BRETSA-affiliated PSAPs answer over 655,000 calls for service per year, including over 300,000 9-1-1 calls. This is typical ratio of calls for service, although PSAPs for small jurisdictions transversed by major interstate highways may receive higher ratios of calls. PSAP Dispatchers need to clear these calls so that they can answer and respond to other calls (a PSAP does not know until it answers a call whether it pertains to an incident which has already been reported, or a different incident to which First Responders have yet to be dispatched). Indeed, one of the characteristics of PSAP positions which has been cited as a cause of dispatcher stress is that dispatchers rarely learn the outcome of the calls they handle. Their involvement in an incident ends when the call ends or First Responders arrive. They don't know if the infant survived, the older person was resuscitated, the child was found, etc. Dispatchers do not remain on a call throughout the emergency response.

4. Impact On Emergency Response of Making PSAPs the Command and Control Centers.

Emergency response would suffer from making PSAPs command and control centers, because of command and control being exercised with, inter alia, (i) an inability to assess the personalities of individuals with whom First Responders are engaging, (ii) inferior situational awareness, and (iii) delayed reaction to developing circumstances. First Responders must operate autonomously. It would endanger First Responders and the public to have command and control exercised from a remote location.

In order to make the PSAPs command and control centers, (i) substantial additional staffing would be required, (ii) dispatcher qualifications would have to include First Responder training and experience suitable to qualify them for command positions (or at least incident-command positions) in addition to currently-required dispatcher qualifications, (iii) PSAPs would require multiple video feeds from any incident location to even approximate the situational awareness available to First Responders on-scene, and (iv) additional public safety radio frequencies and devices would be required for PSAPs to direct First Responder activities.³ The increased difficulty in recruiting qualified candidates, and the increase in PSAP costs including personnel and equipment costs, is inestimable.

It is generally accepted in the 9-1-1 community that only about two percent of people have the currently required characteristics and qualifications for dispatcher positions. Only about one percent of people who apply for dispatcher positions are offered positions, even though many PSAPs are perpetually understaffed and would hire *every* qualified applicant. One-half of

³ If reports and commands currently given verbally (not over the radio but person-to-person) to and from an on-scene commander are to instead go through a dispatcher at a PSAP, even greater expansion of local public safety frequencies and radio systems will be required.

dispatchers hired resign during training. This situation will only be exacerbated by increasing the qualifications required of dispatchers.⁴

Budgeting for state and local First Responder agencies *is* a zero-sum game. State and local governments and First Responder agencies must allocate limited budgets among public responsibilities. Many states are prohibited from borrowing money and must balance their budgets, like Colorado. Like many states, Colorado's constitution prohibits agencies and local governments from borrowing money, and indeed BRETSA cannot even enter into multi-year agreements which are not conditioned upon annual reappropriation by BRETSA. Colorado also has a Taxpayer Bill of Rights ("TABOR") which prohibits increases in local or state taxes without voter approval, and requires refunds in the event of excess tax receipts.

Public safety agencies must allocate their budgets among First Responder salaries, training and equipment; PSAP equipment, systems, personnel and training; jail operations; victims assistance programs and other operations and programs, some of which may be federally mandated. While First Responder agencies hope that developing technologies will make PSAP operations more cost-efficient; the vision of transforming PSAPs into command and control centers would substantially increase the PSAP's share of agency budgets. What services should agencies cut to accommodate these increased costs? The number, equipment or training of First Responders? Jail operations? Victims aid programs? Should local and state governments divert funds from K-12 education or other state or municipal budget categories to public safety budgets to meet these increased PSAP costs?

⁴ First Responders and dispatchers "are made of different stuff." As a general observation, First Responders want to be in the action, engaging with people and dealing with them face-to-face. First Responders need to be capable of dealing with the injured and dead, and often gruesome accident and crime scenes. First Responders are comfortable operating autonomously and taking command of situations and directing the actions of others. These are skill sets and personality types which are not required of dispatchers.

Transitioning PSAPs to command and control centers, simultaneously with the Commission's promotion of PSAP consolidation, would also likely require changes in state laws and even state constitutions regarding governmental authority and governmental immunity. It would certainly be inconsistent with constitutional rights and requirements in home rule states like Colorado.

States, counties and many cities have Emergency Operations Centers ("EOC") which are activated in the event of a major or wide-spread public emergency to *coordinate* response efforts. When activated, EOCs are staffed by First Responder command personnel, and *supported by PSAPs* and other information sources. Given how infrequently EOCs are activated, there would seem to be little demand for PSAPs to serve as command and control centers.

B. Provision of Medical Records To PSAPs.

Parties promoting NG9-1-1 have touted the ability with NG9-1-1 of transmitting medical records to PSAPs and/or First Responders. While NG9-1-1 will enhance the ability of PSAPs to access sources of medical records, *if they exist* and can be accurately accessed in real time, accessing medical records will not necessarily improve outcomes, or improve outcomes in a sufficient percentage of cases to warrant the investment.

Neither dispatchers nor First Responders are trained to interpret or use medical records in dispatch or emergency response. For dispatchers or First Responders to interpret and use medical records would likely delay dispatch or transport. It would also require that dispatchers and First Responders have significant additional qualifications and training beyond those currently required, and impose substantial additional costs and potential liabilities on First Responder agencies. In order to justify the expense of using medical records in dispatch and emergency response, the use of medical records would have to positively impact more outcomes than alternative expenditures.

In the American emergency response system, First Responders provide First Aid and stabilize injured or ill subjects as necessary, and transport those subjects to Emergency Rooms as expeditiously as they safely can. First Responders do not diagnose and treat subjects, and this could only delay the arrival of injured or ill subjects at the Emergency Room with adverse results on outcomes. Emergency Rooms, however, are staffed with medical professionals who have the training and experience to diagnose and treat the subjects, and to review and interpret medical records if available and helpful to their task.

Such a dramatic change in emergency response as having dispatchers or First Responders access and review medical records, and diagnose and treat subjects prior to transport, should not be undertaken without demonstrable evidence that it will improve outcomes.⁵

C. Consolidation of PSAPs.

BRETSA understands that two of the smallest states in the Union, New Hampshire and Rhode Island, each have a single PSAP statewide (Rhode Island would fit within Colorado almost 100 times, and New Hampshire would fit in Colorado almost 12 times). PSAP managers, FCC Commissioners and others have now suggested that PSAPs should be consolidated to no more than one-per-state. This vision ignores constitutional and legal considerations as well as operational and practical considerations. Surprisingly, it promotes centralization of services when technology is increasingly permitting more distributed, survivable and responsive services.

To focus on practical and operational considerations, dispatchers are required to know the laws and ordinances in effect in the jurisdictions they serve, and the business rules, policies and procedures of the agencies they dispatch. People may call 9-1-1 and report a robbery when in

⁵ BRETSA assumes that medical records would be used to diagnose and treat subjects, as First Responders sought to do in the one instant of which BRETSA is aware (but in which they misdiagnosed the subject and endangered his life by delaying transport while they did so). If the purpose is merely to advise First Responders of a subjects special condition, there are much more efficient means of providing this information without requiring dispatchers or First Responders comb through medical records for the information. This is another example of a solution in search of a problem.

fact the incident was a burglary or criminal trespass. Examples of municipal violations are open container, noise, traffic and municipal trespass violations. Knowledge of the elements of the crimes and violation allows a dispatcher to determine whether to dispatch an officer, civilian report taker, or advise the caller to submit a counter report or online report. Each jurisdiction or agency adopts the processes and business rules which best meet the needs of its jurisdiction and personnel.

BRETSA has long operated a hosted CAD system and hosted PSAP telephone system serving four separate PSAPs operated by four different law enforcement agencies and serving 9 law agencies, 30 fire departments or districts and a commercial ambulance company, in just one of Colorado's 64 counties. Differences in agency business practices and operating procedures come to light when developing the CAD hierarchy and incident types for the different agencies. Agencies develop distinct incident types for record-keeping, analysis and response requirements (the business rules which indicate the number and type of units to be dispatched to a type of incident, such as a brush truck for initial response to a reported grass fire). This challenge would be exponentially increased on a statewide basis. The Commission cannot prescribe such consolidations unless state constitutions as well as the U.S. Constitution are to be violated, and local authority and home rule as well as state authority, is to be usurped to implement a uniform, one-size-fits-all solution.

BRETSA notes that firefighters tend to respond to incidents as a group or team, and are accustomed to working with other departments or districts in a mutual aid scenario. Once they are dispatched, they do not generally interact with the PSAP other than to call for support from additional resources. Fire agencies do not generally have a great concern with which PSAP dispatches them, and are more comfortable with PSAP consolidation.

Law officers, on the other hand, are typically on patrol and initially respond to incidents alone. They have much more interaction with the PSAP, and rely on the PSAP as their lifeline. Law officers tend to rely more on the “local knowledge” of dispatchers, who become familiar with people who generate or are the subject of frequent 9-1-1 calls, locations involved in many 9-1-1 calls, and with the officers they dispatch. Law officers rely upon dispatchers to anticipate information they will need, and provide it when or before requested. The trust developed between First Responders and dispatchers is important.

BRETSA recognizes that there are means of compensating for loss of local dispatchers with local knowledge when consolidating PSAPs. CAD systems include common place-name files, premises records, and premises flags. Dispatchers in a centralized PSAP can be routinely assigned to handle calls from the same jurisdiction. However maintaining such assignments would complicate personnel scheduling, and may be inconsistent with efficiencies to be realized by centralizing PSAP operations. Local knowledge developed in this manner would not be as thorough and assist callers as well as that developed and maintained through local residence.

In some areas, particularly in small jurisdictions, PSAP personnel not only answer 9-1-1 calls and dispatch First Responders, but they may also serve as jail matrons to search and assist with female prisoners, monitor prisoners, and provide additional services. The cost of these employees is spread across their areas of responsibility, and consolidation of PSAPs may impact the jurisdiction’s ability to employ personnel to perform such supplemental services which have been assigned to dispatchers. The vast majority of PSAPs across the country are small, with five or fewer dispatch positions.

Local jurisdictions have sunk investment in local PSAP facilities, systems, equipment and training. BESP/SSPs, and perhaps originating service providers (“OSPs”), have sunk

investment in telecommunications facilities to regional selective routers and PSAPs.⁶ Local jurisdictions have hired and trained dispatchers, and IT personnel to maintain PSAP equipment and systems. The number of localities purchasing CAD systems and other PSAP equipment, systems and services also supports a highly competitive market for such products and services, driving innovation and constraining prices. The substantial reduction in the number of PSAPs which would result from the proposed consolidation of PSAPs would necessarily impact the competitiveness of the PSAP market. Investment will be required in network facilities to connect the statewide PSAP with local agency radio and tone-out dispatch systems. Thus, projected costs savings and other efficiencies from PSAP consolidation may not be realized.

Consolidation also implicates state constitutional issues, issues of governmental immunity for PSAP personnel not employed by the local government whose First Responder agencies they dispatch, and state and local government rights and authority. It would exacerbate political disputes regarding allocation of resources between different regions or jurisdictions within a state. Consolidation may impact operations and procedures among the different jurisdictions and agencies, and force homogenous, one-size-fits-all, municipal codes and First Responder operations, policies and practices upon a very heterogeneous nation and very heterogeneous states. It may also reduce the effectiveness of emergency response and adversely impact outcomes.

The April 2014 multistate NG9-1-1 outage demonstrated that an outage or failure in an NG9-1-1 system which is national in scale, with just two data complexes serving the entire country, would have broad impacts including services outages in multiple states. Similarly, with a single PSAP serving an entire state, any failure or service outage in that PSAP will have broad

⁶ “BESP” is an acronym for “Basic Emergency Service Provider,” a party certificated by the Colorado Public Utilities Commission to aggregate 9-1-1 calls from originating service providers and transport them to the appropriate PSAP. A BESP is a “system service provider,” or “SSP,” as that term is used by the Commission.

effect, impacting emergency response across the entire state the PSAP serves. A system of distributed PSAPs, particularly when interconnected with IP facilities, would be particularly robust and survivable. A PSAP outage would impact only the city or county served by the PSAP. The existence of nearby interconnected PSAPs as in the BRETSA-supported system, also allows for more expeditious and effective restoration of service.

D. The Commission Must Be Wary Of Unintended Consequences.

Because the Commission is not writing on a clean slate, actions it takes with respect to 9-1-1 and PSAP operations could have unanticipated consequences on First Responder budgets, operations and policies, and on the effectiveness of emergency response. Imposition of Commission requirements on states or PSAPs with respect to PSAP practices or operations could constitute unfunded mandates, diverting limited local budgets from expenditures which more significantly contribute to favorable outcomes of public safety incidents. The Commission must consider the impacts of actions it takes not just upon 9-1-1 call technology and capabilities, but upon PSAP and First Responder operations, procedures and budgets—matters which lie far outside the Commission’s expertise and authority.

II. State Oversight of 9-1-1 Is Prudent.

State rather than federal oversight of 9-1-1 is most prudent. As demonstrated above, PSAPs are an integrated part of the public safety, emergency response systems in the states. Changes in PSAP operations and consolidation of PSAPs will necessarily impact First Responder operations and emergency response. The Commission is a *communications* rather than a *public safety* agency. The Commission’s 9-1-1 proceedings have been dominated by service providers and others who fail to understand the integration and interrelation of PSAP operations with the overall public safety system. The result has been decisions which (i) drive

investment in solutions which will not improve public safety (and divert funding from solutions which do improve public safety), and (ii) are designed to improve outcomes in a small number of cases over an extended period, ignoring measures which could be implemented today to improve outcomes in a much larger number of cases. Commission decisions promoting NG9-1-1, PSAP consolidation and changes in PSAP operations can constitute unfunded mandates and divert funds from more effective applications.

Officials with responsibility for overall public safety agency operations and budgets, and the PSAP community, are much more active at the state level than at the Commission. The states are much more cognizant of the unique conditions and circumstances in their jurisdictions, and are better advised by local public safety officials.

A. The Commission Has Pursued Solutions That Will Not Improve Outcomes.

The Commission's record with respect to 9-1-1 does not inspire confidence. Public safety budgeting *is* a zero sum game. State and local governments and agencies have limited budgets.⁷ Funds allocated to any specific purpose are not available for other purposes. Public safety agencies must accordingly allocate funds to those purposes which will improve outcomes in the larger number of cases.

As discussed above, the Commission's vision for PSAPs is that they be consolidated to no more than one per state, and become command and control centers; notwithstanding the impact upon First Responder operations and the effectiveness of emergency response. The Commission persists in the view that the importance of NG9-1-1 is the potential for transmission of photos, videos, medical records and crash telemetry information to PSAPs.

⁷ Like most states, Colorado must balance its budget each year. The Colorado Constitution also prohibits BRETSA and other governmental entities from borrowing funds, and indeed BRETSA may not even enter into multi-year agreements which are not conditioned upon annual reappropriation. BRETSA must accumulate funds over time to meet capital expenditures, and projects its budgetary requirements over 10 years.

Videos and photos are not a substitute for an individual at the scene with five-sense, 360 degree situational awareness verbally telling a dispatcher what he or she is seeing, and answering the dispatcher's questions. Videos and photos generally show a limited view of the scene, and may distort the perspective. Focal lengths can distort depth-of-field and portray elements as closer together or further apart than they actually are. A layman's perspective of the images which would be important to a PSAP may be quite different from the information which would actually be useful, and the images sent may thus be of no use whatsoever. In addition, laymen intent on getting a photo or video they *think* will be useful to a PSAP may well become secondary victims as they focus their attention on taking pictures rather than on their personal safety. Thus, this vision assumes, among other things, that (i) the public will know what photos and videos will be useful to the PSAP, (ii) photos and videos will be more efficient than a voice call in conveying to a PSAP the information necessary to dispatch First Responders to the location of an incident, (iii) photos and videos will provide complete and accurate perspectives of the scene of an incident, (iv) members of the public will not put themselves in danger and become secondary victims in seeking to get photos or videos of incidents, and (v) the costs of the bandwidth for transmission of photos and videos to PSAPs, storage systems to record them, and of additional dispatchers to deal with these formats, will improve outcomes more than competing investments, or more than budget cuts which will have to be made to accommodate the new expense (such as the number, training or equipping of First Responders) will harm outcomes.⁸

In response to concerns that transmission of photos and videos to the PSAP will not improve outcomes and will increase dispatcher stress and turnover in PSAP personnel, proponents have suggested that photos and videos should bypass the PSAP and be transmitted to

⁸ See December 12, 2011 Joint Comments of the Boulder Regional Emergency Telephone Service Authority and the Colorado 9-1-1 Task Force, on the September 22, 2011 Notice of Proposed Rulemaking in FCC Docket No. 11-153, pp 13-39 (Available at <http://apps.fcc.gov/ecfs/comment/view?id=6016877846>, last accessed March 21, 2015.)

First Responders. However one BRETSA-dispatched police department has invested in software to blank-out mobile data terminals (“MDTs”) in the police vehicles while the vehicles are in motion, to avoid distracted driving accidents. Longmont firefighters complain that their fire trucks bounce around too much for them to use their MDTs, and BRETSA is unaware of any research conclusively demonstrating that transmission of photos and videos to PSAPs will improve outcomes in emergencies more than alternative investments.

BRETSA has addressed above the relative utility of transmission of medical records to PSAPs. BRETSA has also pointed out that public safety professionals have stated that they will not have PSAPs initially dispatch additional units, beyond the standard complement, in response to crash telemetry data from Automatic Crash Notification systems. Public safety agencies cannot afford to commit additional units, and make them unavailable to respond to other incidents, until a public safety professional has made an on-scene assessment of response requirements and called for additional vehicles.

Finally, the Commission has adopted rules for improved location standards to enable First Responders to locate wireless callers who cannot report their location to a PSAP; when (i) exponentially more outcomes are affected by the requirement that PSAPs engage in an anachronistic exchange of faxes to request wireless providers “ping” the location of customers when ALI information is unavailable, a 9-1-1 call has been disconnected, or the PSAP is trying to locate a suicidal caller who has called someone other than the PSAP, and (ii) exponentially more outcomes than those are affected by Phase I Misroutes. See *Wireless Location Accuracy Requirements (Fourth Report and Order in PS Docket No. 07-114)*, FCC 15-9, released February 3, 2015. See, also, May 12, 2014 Comments of The Boulder Regional Emergency Telephone Service Authority On Third Further Notice Of Proposed Rulemaking in PS Docket No. 07-114 at

2-13 (Available at <http://apps.fcc.gov/ecfs/comment/view?id=6017635701>, last accessed March 23, 2015); July 14, 2014 Reply Comments of The Boulder Regional Emergency Telephone Service Authority On Third Further Notice Of Proposed Rulemaking in PS Docket No. 07-114 at 6-7 (Available at <http://apps.fcc.gov/ecfs/comment/view?id=6017893482>, last accessed March 23, 2015); February 14, 2015 letter from Joseph P. Benkert, counsel to BRETSA, to Tom Wheeler, Chairman, Federal Communications Commission, et. al. (Available at <http://apps.fcc.gov/ecfs/comment/view?id=60001014359>, last accessed March 23, 2014); February 13, 2015 e-mail from Joseph P. Benkert, counsel to BRETSA, to David Simpson, Chief, Public Safety and Homeland Security Bureau (Available at <http://apps.fcc.gov/ecfs/comment/view?id=60001016553>, last accessed March 23, 2015).

B. Public Safety Authorities Participate More Actively At the State Level Than in FCC Proceedings.

The Commission is an expert agency in the field of telecommunications, not public safety. Only a handful of local public safety entities regularly participate meaningfully in Commission proceedings regarding 9-1-1.⁹ BRETSA regularly participates in these Commission proceedings, and seeks to consistently present the Commission with the perspective not only of the PSAPs, but also of the impact of changes in PSAP operations on overall public safety agency operations and budgets. However the public safety community in general participates much more actively at the state level.

In Colorado, for example, the Colorado PUC long-ago adopted rules which created the 9-1-1 Colorado Task Force, which includes representatives of the 9-1-1 Authorities and PSAPs, Basic Emergency Service Providers which aggregate and route 9-1-1 calls to the PSAPs, Originating Service Providers, the deaf and hard of hearing community, and others. There are

⁹ BRETSA does not consider submission of one- or two-page boilerplate letters prepared by associations for signature by local officials to constitute “meaningful participation.”

more 9-1-1 Authorities and PSAPs which seek voting seats on the Task Force than the 17 seats available to them. The state Sheriff's, Police Chief's and Fire Chief's Associations have also been active at the state level in addressing legislative matters.

In the wake of the 9/11 attacks, former Colorado Governor Owens established seven (later expanded to nine) All-Hazards Emergency Management Regions to improve mutual aid and coordinate all-hazards planning, training and exercise efforts, as well as standardization for equipment and more efficient use of limited funding and resources. The functions included in the Regions include emergency management, law enforcement, fire services, special districts, public health, emergency medical services, hospital organizations, public works, regional transportation and financial services.

Local public safety officials with overall management and budget responsibilities are much more engaged at the state level, where their participation and collaboration with neighboring and other public safety authorities in their state has a more direct impact on emergency planning and response. Given this involvement within the states and their generally limited budgets (particularly in the current economy), most public safety organizations and officials simply lack the time and resources to participate actively in Commission proceedings. Thus, BRETSA believes that the Commission's understanding of public safety operations, and the potential impacts of changes in PSAP operations on the effectiveness of public safety operations and emergency response, is superficial at best, when compared with that of state agencies and officials.

The exact opposite situation prevails regarding participation by Originating Service Providers, vendors and other non-public safety parties at the Commission and state levels. The Colorado 9-1-1 Task Force has two voting seats each for LECs, wireless providers, and CLECs

including VoIP providers. The Task Force faces perennial difficulty filling these seats and getting OSPs to attend the meetings. Yet the OSPs participate quite actively before the Commission.

With their greater understanding of the characteristics and conditions in their states and the more active participation of local public safety authorities; state agencies and authorities can gain a greater understanding of the impact of changes in 9-1-1 service and PSAP operations on effective public safety operations. State agencies and authorities can best determine those changes which will improve public safety outcomes consistent with the each state's characteristics and prevailing economic conditions.

C. States Will Adopt Solutions Which Will Best Serve Their Constituents.

State authority over 9-1-1 will enable states to adopt those solutions which will best serve the interests of their constituents.

1. Transition to NG9-1-1.

The Commission has expressed dismay that the public safety community is not moving more expeditiously to deploy NG9-1-1. However in 2011, Mission Critical Partners advised the Colorado 9-1-1 Task Force that most states which were transitioning to NG9-1-1 were doing so to obtain redundancy and diversity in their 9-1-1 Systems. Colorado has three pairs of interconnected redundant and diverse 9-1-1 Selective Routers, redundancy and diversity in its 9-1-1 network, and some of the lowest rates in the country for 9-1-1 service. Thus, Mission Critical Partner advised that Colorado need not rush to transition to NG9-1-1.

Such substantial transitions in technology as the transition from legacy 9-1-1 to NG9-1-1 will inevitably be accompanied by unanticipated system failures and outages. Even commercial entities typically delay upgrading Operating Systems and software versions, and PSAPs delay upgrading CAD and other software and systems, until other users have upgraded and bugs have

been identified and corrected. States may wish avoid being on the cutting edge, and delay deployment of NG9-1-1, until experience with NG9-1-1 has been gained in other states and vulnerabilities and bugs have been identified and addressed.

With (i) the deployment of text-to-911 solutions which do not require deployment of ESInets, (ii) carriers not yet being ready to transmit videos and photos to 9-1-1 and (iii) PSAPs not yet ready to receive them (despite their questionable utility); NG9-1-1 appears to be a solution in search of a problem for those states which enjoy redundancy and diversity in their 9-1-1 Systems. Transition to NG9-1-1 means that PSAPs would incur two- to three-times the cost to receive the same calls in digital format that they currently receive in analog format. BRETSA does not doubt that the transition to IP-911 is inevitable given the transition in OSP networks to IP; but there is no reason for PSAPs to incur additional expense until additional utility is provided, or the current analog systems cannot be sustained.

Many public safety authorities believe the real promise of NG9-1-1 and ESInets lies in (i) the rule-based call-routing capabilities, (ii) the capability of PSAPs to transfer CAD incident records with the transfer of 9-1-1 calls from PSAP-to-PSAP, and (iii) improved collaboration between PSAPs. However NG9-1-1 alone will not make these capabilities useful. CAD data fields often vary from CAD vendor-to-CAD vendor, and system implementation to system implementation. PSAPs do not have access to the on-duty and available First Responder units, the incidents to which First Responders are already responding, the business rules of the First Responder agencies, or the dispatch radio frequencies and systems, for jurisdictions other than the one they serve. Thus many of the purported or real benefits of NG9-1-1 will not be realized even if NG9-1-1 is deployed.

Other public safety officials believe an important benefit of NG9-1-1 will be the availability of hosted CAD, PSAP telephone and other systems for smaller PSAPs, for a per-month, per-seat fee. Such hosted services are much more budget-friendly for PSAPs than periodic capital expenditures to purchase or upgrade systems; assuming the cost of bandwidth to support the services does not exceed the savings which may be realized by many PSAPs installing think clients and sharing the costs of the host systems. Some states may wish to accelerate deployment of ESInets should they determine that hosted PSAP systems would benefit the public interest.

2. ESInet Bandwidth for Video and Photos.

As BRETSA has discussed, BRETSA and other public safety agencies and officials believe the transmission of video and photos to the PSAP will not improve outcomes in the ordinary case. Just as one means of delivering text-to-911 messages to PSAPs is via browser interface using the public internet, some states may elect to have such information transmitted over the public internet to a web or MMS address *upon request by a dispatcher*. This would reduce required investment in ESInet bandwidth to meet uncertain demand.

3. PSAP Consolidation.

A state may fairly decide not to require PSAP consolidation, at least to the extent envisioned by the Commission. PSAPs may determine that there is a limit to the number of jurisdictions for which dispatchers can know the elements of municipal violations, PSAP business rules and agency policies and procedures, and maintain local knowledge. A state may fairly decide that a robust system of interconnected local PSAPs is more survivable than a statewide PSAP, outages and failures of which would impact emergency response statewide. A state may fairly decide that the waste of sunk investment in local PSAPs and the cost of deploying a new statewide PSAP and interconnections with local dispatch systems will not be

justified by the benefits of such consolidation, if any. To the extent states do determine that some consolidation of PSAPs would be prudent, the appropriate criteria for consolidation may vary from state-to-state. Criteria could include the population served, area served, call-volume, other criteria, or some combination thereof.

4. Network Infrastructure and Outage Reporting.

Colorado, like most states, has outage reporting requirements. Outages within the 9-1-1 system, or within OSP's networks, can impact the ability of the public to reach 9-1-1. Outage requirements must be related to remedial actions, such as contingent call routing options and public information announcements advising the public in affected areas of alternative numbers or means to reach public safety agencies.

In Colorado, with its redundant and diversely located 9-1-1 Selective Routers, 9-1-1 trunks, and alternative routing options, outages in the 9-1-1 System should not interrupt 9-1-1 service. Outages in OSP networks and facilities can be of greater concern. There are LEC end offices in Colorado which are not connected by diverse and redundant trunks to the remainder of the LEC's network and the 9-1-1 System. The service provider has suggested that it may be uneconomic to build diverse and redundant connections to the unprotected end offices given Colorado's terrain and steeply declining wireline subscription rates.

It has been determined as a result of recent floods which washed away LEC trunks to such unprotected wire centers, that wireless providers also rely on LEC facilities to connect cell sites with MSCs, and the LEC facilities also transport VoIP traffic. BRETSA is unaware of any wireless provider's reporting of service outages, and it is aware of only one report by a VoIP provider which was unable to identify the cause, nature or extent of the service outage even in its final notification that the outage had been resolved. Some rural providers have such small and

sparsely populated service areas that outages would not reach Commission reporting thresholds, given the scale of the Commission's oversight.

The dominant LEC in Colorado, CenturyLink, has (i) provided representatives of BRETSA and other 9-1-1 Authorities with access to their facility maps within the Authorities' jurisdictions (subject to non-disclosure agreement), and (ii) added the representative to CenturyLink's internal outage reporting listserver, in order to provide PSAPs situational awareness of the occurrence of service outages. BRETSA has advocated the Public Utility Commission adopt rules requiring all OSPs to advise 9-1-1 Authorities, the Colorado PUC and state EOC of their facilities in the respective jurisdictions, and of network dependencies,¹⁰ and include representatives on any internal outage reporting systems. This is to provide situational awareness regarding outages affecting the ability to complete 9-1-1 or ENS calls. In the event of a wildfire or flood, it is important for Colorado PSAPs, particularly those serving mountain areas of the state, to know if smaller isolated communities (even as small as one- or two-dozen homes) have suffered service outages, as a result of facilities being washed away or burned. Alternatives to ENS for delivery of evacuation notices to ENS may be required, for example. Thus BRETSA has advocated requirements that service providers make representatives available to PSAPs, the PUC and state EOC during major public safety events on an on-call basis, to provide updated outage information when and as available. Outage reporting requirements must balance the need for authorities to be aware of outages materially impacting 9-1-1 and ENS services, with the burdens on providers of reporting outages.

States which do not have (i) small, rural LECs serving small numbers of customers, (ii) end offices which are not protected by redundant and diverse interoffice facilities, or (iii) shared

¹⁰ It is important for a PSAP to know whether wireless or VoIP networks provide an alternative means for the public to reach 9-1-1/the PSAP, or those networks share facilities and thus may be affected by the same outages interrupting other OSP's services.

facilities or dependencies between OSPs, may not require the same outage reporting requirements that are appropriate for Colorado.

5. Structure of 9-1-1 Service.

Some states contract for 9-1-1 service on a statewide basis. In other states, 9-1-1 service is contracted on a regional or even local basis by local authorities. In transitioning to NG9-1-1 service, states may choose to require deployment of data complexes within the state so that they will not suffer outages impacting other states generally, or they may choose to rely upon nationally deployed data complexes. In states like Colorado, 9-1-1 service is offered pursuant to tariff.¹¹ Other states may pursue competition to constrain prices and spur innovation. Ultimately each state should determine the regulatory structure of 9-1-1 service within its boundaries.¹²

6. Certification of Providers.

It is essential that BESPs/SSPs and other providers aggregating, routing, and transporting 9-1-1 calls, and providing other component services of legacy 9-1-1 service or NG9-1-1 service, have the technical, managerial and financial qualifications to provide the service. Technical and managerial qualifications go to the reliability of the service and appropriate maintenance and repair of the service. Financial qualifications bear upon a provider's ability to deploy, maintain and operate the service, maintain a workforce qualified to repair or restore service, and maintain a stock of materials and equipment to assure expeditious repair or restoration of the service.

¹¹ 9-1-1 service still has many of the indicia of a natural monopoly. There is only one customer for the service in any jurisdiction, and that customer is a publicly supported governmental entity. There are economies of scale in the provision of 9-1-1 service, and certain efficiencies which may be realized with a single provider as in the transfer of Phase I-misrouted calls and related data between PSAPs.

¹² BRETSA notes that some states have deregulated IP-based services including NG9-1-1. The Commission should respect this decision, rather than adopting backstop regulations. 9-1-1 calls remain intrastate calls whether or not regulated by the state. The legislatures and governors which deregulated NG9-1-1 will have to answer to the voters if deregulation harms the public interest and/or results in increased service costs and increased 9-1-1 taxes, surcharges or fees, or other taxes.

Financial qualifications also go to a provider's ability to continue in business. Some telecommunications resellers which entered the Colorado market, subsequently terminated business in Colorado, leaving their customers without service until they contracted with alternative providers. Such a result in the case of 9-1-1 service would place lives in danger.

Each state is in the best position to establish and pass upon qualifications of BESP/SSPs and other entities providing 9-1-1 service or components thereof, given the structure of 9-1-1 service in the state. States may also choose to require certification only of the BESP/SSP, or also of contractors providing component services to the SSP.

7. 9-1-1 Funding.

The means by which state and local governmental entities pay for 9-1-1 service, is within the discretion of state and local governments and their citizens. Some states fund 9-1-1 service through surcharges, fees or taxes on telephone services, remitted at the state level. In Colorado, the amounts of surcharges are established by and remitted to the local 9-1-1 Authorities. The means by which a state chooses to fund 9-1-1 service would not seem to impact the Commission.

8. General Oversight, Change Management and Enforcement.

BRETSA believes the Commission lacks the resources necessary to exercise general oversight of 9-1-1 service within each state, let alone implement and oversee changes in 9-1-1 service based on technological advancements, including NG9-1-1. It would be impractical for the Commission to undertake to determine the public interest regarding 9-1-1 in each state, in accordance with the APA.

Enforcement should also be at the state level. Service providers and BESP/SSPs are generally accorded immunity or limited immunity from liability.¹³ This is because of the

¹³ In Colorado, service providers are provided limited immunity from liability in the provision of 9-1-1 service. They are immunized against liability for negligence, but not for gross negligence or intentional acts.

sympathetic cases that might be presented to juries, and potential damage awards which might make the provision of 9-1-1 service uneconomic. With the BESP/SSPs in many states being the dominant LECs with rapidly declining subscribership, the assessment of forfeitures has the potential to make BESP/SSP service uneconomic. States are in the best position to enforce regulations regarding 9-1-1 service, while not making the service uneconomic. Some states may wish to require investments in remedial measures in lieu of forfeitures.

III. The FCC Has A Limited Role to Play In Oversight Of 9-1-1, In Conjunction With The States.

The FCC should play a limited role in oversight of 9-1-1. The primary role the Commission can play is in (i) requiring that any new communications technology be E9-1-1 compliant, including accurate call routing and provision of caller location information to the PSAP, as a precondition to authorization, (ii) developing requirements for more accurate wireless and VoIP call routing and text-to-911 routing (including addressing wireless Phase I Misroutes) and caller location information, and (iii) limitations in the types and formats of data which may be transmitted to PSAPs.¹⁴

The Commission should also establish both public and secure private clearinghouses for information related to 9-1-1. Public information would include the database of PSAPs which have elected to receive text-to-911 messages, and the means by which they wish to receive them.

¹⁴ There are numerous applications for smartphones (“Apps”) being developed by entrepreneurs which propose to automatically send text messages or other information to PSAPs. The Apps or linked websites will likely provide any information in a unique format to achieve a “unique look and feel,” making it more difficult for dispatchers to locate any information which may be relevant. As the 9-1-1 system transitions to an ESInet, there is a risk of PSAPs being inundated with information from such Apps. BRETSA respectfully submits that (i) no automated alarm information should be transmitted to a PSAP which has not affirmatively agreed to accept the information, and then should be transmitted on a secondary basis and only after an alarm service provider has cleared any false alarms, (ii) to the extent an App or service transmits personal health monitoring data (such as blood sugar levels or cardiac arrhythmia) or other technical data, a service provider must first intercept and interpret that data and transmit useful information to the PSAP or Emergency Room, and (iii) any data transmitted to a PSAP should be transmitted in a standard format, from which any CAD vendor can develop an interface to its proprietary display format so that dispatchers will be presented with the same information in the same order or configuration no matter what App or service transmitted the data.

It would also include specifications of data formats which may be submitted to PSAPs. Private information would include cybersecurity alerts and results of investigations into the technical causes of 9-1-1 system outages, for the benefit of providers and public safety agencies. This information would not be publicly disclosed lest it identify vulnerabilities in 9-1-1 and NG9-1-1 systems to hackers or others who would use the data for improper purposes.

To the extent the Commission develops regulations pertaining to 9-1-1, it should do so through a Federal-State Joint Board pursuant to 47 U.S.C. §410. The membership of the Joint Board should include, *inter alia*, public safety agency officials with overall managerial and budgetary responsibility for public safety operations, such as police chiefs and sheriffs. The involvement of public safety professionals with overall responsibility for public safety agency operations and budgeting is essential to assure that any recommendations and regulations are sensitive to the integration of PSAP operations with emergency response operations and procedures, and will not adversely impact the efficacy of emergency response in any jurisdiction.

IV. The States Have Jurisdiction Over 9-1-1 Service.

BRETSA has demonstrated that it is prudent for the states to regulate 9-1-1 service, because 9-1-1 service and PSAP operations are integrated into overall public safety services and emergency response and can impact the efficacy of these services. Moreover 9-1-1 calls are jurisdictionally intrastate and thus subject to state oversight. Further, the issues the Commission seeks to address by seeking to regulate 9-1-1 services are the result of the Commission's failure to confirm the states' jurisdiction over IP-911.

A. The Circumstances the Commission Cites As Justification For Regulating 9-1-1 Service Have Resulted From Its Failure to Confirm State Jurisdiction.

The circumstances the Commission asserts compel it to take over regulation of 9-1-1 service include (i) "sunny day outages" impacting multiple states purportedly due to the

provision of increasingly interstate 9-1-1 networks and systems,¹⁵ (ii) the need for oversight of providers supplying components of 9-1-1 service, and (iii) the decisions made by some states to deregulate 9-1-1. These are conditions of the Commission's own making.

BRETSA understands that the NENA standards for NG9-1-1 data complexes (9-1-1 location, routing and security functions) were specifically developed to permit use of off-the-shelf components in order to control costs and facilitate redundancy and diversity. IP networking technology was also developed to facilitate survivability through a web of redundant and diverse routers and transmission facilities. Taken together, one of the important features of NG9-1-1 service is its potential survivability because of the redundant and diverse distribution of data complexes and transmission paths.¹⁶

The NG9-1-1 provider which suffered the April 2014 outage has deployed just two NG9-1-1 Data Complexes nationwide. Deploying an NG9-1-1 system on a national scale with two Data Complexes nationwide virtually assures that any outages which do occur will have broader impacts than NG9-1-1 systems deployed state-by-state.¹⁷ With more distributed state-by-state systems, the impacts of outages would be more limited. Outages might also be avoided, and diagnosis and correction simplified, by the reduced system loads with state-by-state systems. With state-by-state or even regional systems, lessons learned from outages or failures which do occur would not only have lesser impacts, but lessons learned from outages could benefit all systems.

¹⁵ It is the nature of the communications, rather than the location of the network facilities, that determines jurisdiction. *National Association of Regulatory Utility Commissioners v. F.C.C.*, 746 F.2d 1492, 1498 (1984) (“*NARUC v. F.C.C.*”).

¹⁶ Some of the redundancy in transmission paths with NG9-1-1 is provided through the rule-based alternative routing capability to terminate 9-1-1 calls over a dedicated 9-1-1 network, the PSTN to any connected wireline, wireless or VoIP device, over the public Internet to any 56Kbps or faster connection, or even over public safety radio systems such as Colorado's statewide Digital Trunked Radio (“DTR”) system.

¹⁷ Interconnecting state ESInets by extending transmission facilities serving PSAPs in border counties to interconnect with neighboring state ESInets would result in a more robust, ARPA-like network than would backbone networks.

Reasonable minds can disagree on the relative merits of a nationwide NG9-1-1 system versus a more distributed, state-by-state NG9-1-1 system. However the states have the authority to determine the configuration of, and oversee, NG9-1-1 service. States also have the authority and discretion to determine whether to regulate components of 9-1-1 service provided pursuant to contract with a BESP/SSP, or to take a “one-throat to choke” approach and hold the BESP/SSP responsible for rule compliance. The Commission should confirm state authority over 9-1-1, rather than to usurp it.

Finally it appears that states have deregulated IP-telephony services including NG9-1-1 in the face of provider arguments that the FCC has exercised preemptive jurisdiction over such services. The Commission has failed to address these claims, notwithstanding BRETSA’s 2012 Petition for Declaratory Ruling.

B. Providers Have Argued That States Lack Jurisdiction Over IP-Based Services, Including NG9-1-1.

In 2012, in Colorado Public Utility Commission (“CPUC”) Docket No. 12R-862T, the CPUC proposed new rule section 2213, 4 CCR 723-2-2213(a)(I):

2213. Deregulation of IP-Enabled Service and Interconnected Voice over Internet Protocol Service.
- (a) IP-enabled service as defined in paragraph 2001(w) and Interconnected VoIP service as defined in § 29-11-101(4.3), C.R.S. are deregulated telecommunications services pursuant to § 40-15-102(6), C.R.S., except:
- (I) to the extent such services are used to provide or support emergency telephone service, in which case such services shall continue to be subject to regulation pursuant to rules 2130 through 2159; and

In the Matter of the Proposed Rules Regulating Telecommunications Providers, Services, and Products (NPRM in CPUC Docket No. 12R-862T), Dec. No. C12-0898-I, Appendix A at 14

(Aug.6, 2012) available at https://www.dora.state.co.us/pls/efi/EFI_Search_UI.search (last accessed March 8, 2015).

In commenting on the proposed rule, Cablevision Systems Corporation (“Cablevision”) stated that “state regulation of public safety and public interest obligations of interconnected VoIP service providers is unnecessary due to the FCC’s comprehensive requirements addressing these matters....” Cablevision August 29, 2012 Comments in CPUC Docket No. 12R-862T, at 10 (footnotes omitted) available at https://www.dora.state.co.us/pls/efi/EFI_Search_UI.search (last accessed March 8, 2015).

The Voice on the Net Coalition (“VON”) stated in its comments on the proposed rule:

Under current law, interconnected VoIP is subject to the exclusive federal jurisdiction of the FCC. At times, the FCC has asserted limited jurisdiction over interconnected VoIP services, but it has not treated interconnected VoIP as a traditional telecommunications service. The FCC’s regulation of interconnected VoIP has been limited to public safety and consumer protection, including requirements to provide Enhanced 911 and to contribute to the Federal Universal Service Fund. The FCC has specifically limited the states to allowing the collection of fees to support 911 and the assessment of state universal service fund contributions, to the extent consistent with federal law.

VON September 28, 2012 Comments in CPUC Docket No. 12R-862T, at 1-2 (footnotes omitted) available at https://www.dora.state.co.us/pls/efi/EFI_Search_UI.search (last accessed March 8, 2015).

Comcast Phone of Colorado, LLC (“Comcast”) also filed comments on the proposed rule, stating:

IP-Enabled and VoIP services such as Xfinity Voice are subject to exclusive federal regulation. Federal court cases have held that “interconnected VoIP carriers, *i.e.*, VoIP carriers that permit customers to make and receive calls to and from users of the public switched Telephone Network (“PSTN”), are “information services” under the federal Communications Act. As such, they may not be subjected to state public utility regulation.

Formal FCC action remains pending on the classification of interconnected VoIP service (both “fixed” and “nomadic”). The FCC has not yet

expressly preempted states from regulating “fixed” VoIP services because the question has not come squarely before the FCC.

Comcast August 29, 2012 Comments in CPUC Docket No. 12R-862T, at 14 available at https://www.dora.state.co.us/pls/efi/EFI_Search_UI.search (last accessed March 8, 2015).

Subsequently, in the context of deregulatory legislation in Colorado enacted in 2014, Comcast stated in pertinent part:

As was stated during the meeting, providing plenary regulatory authority over IP 911 opens up numerous uncertainties regarding how far the regulations can “reach back” beyond the BESP into the retail IP product. It is premature at this stage to prescribe how regulatory authority must exist over various technological platforms – broadband, wireless, IP – and over certain applications – text, video communications, email – when these platforms and applications have not been regulated by state commissions before, *and the FCC has already entered the field, at least for VoIP-based 911*. I suspect there would be large disagreement over whether and to what extent there should be state agency authority to investigate cellular service providers and manufacturers and hold hearings if a text 911 message allegedly did not get through to a PSAP. Exactly how these services should be regulated – and by whom – can and should be decided via interested stakeholders through a separate process. Trying to come to agreement now on this heady and precarious subject may well scuttle the bill – which is why we have steadfastly maintained our position of “preserve the status quo,” i.e., this bill has no effect on the Commission’s existing authority over 911 or IP 911, whatever that authority is.

We have no opposition to PUC 911 authority over Basic Emergency Service Providers that aggregate and transport 911 calls, regardless of technology. But the #1 proposal goes well beyond that because it extends to all “basic emergency service” (an undefined term), regardless of technology.

December 20, 2012 e-mail from Gregory Sopkin, Esq., attorney for Comcast, to Timothy Kunkleman, Director State Regulatory Affairs, CenturyLink, *et al.* (Emphasis added).

The Commission’s failure to confirm the authority of the states over 9-1-1 service has thus given rise to arguments of federal preemption, and regulatory uncertainty. While the Commission has preempted certain state regulation of nomadic VoIP service, based upon the inability to identify the location from which nomadic VoIP calls originate, that limitation is not applicable to all 9-1-1 calls, and the use of IP routing techniques with networks, such as in an

NG9-1-1 ESInet, does not affect the nature of the traffic. *In re Vonage Holdings Corp. Petition for Declaratory Ruling Concerning an Order of the Minn. Pub. Utils. Comm'n*, 19 F.C.C. Rcd. 22,404 (Nov. 12, 2004) (“*Vonage Order*”).

C. 9-1-1 Calls Are Intrastate Communications.

9-1-1 service was developed for wireline service, and adapted to CMRS and VoIP services, to route 9-1-1 calls to the PSAP with authority to dispatch First Responders to the caller’s location. Thus, 9-1-1 calls both originate and terminate within the same state, and in most cases within the same city or county.

Section 3 of the Communications Act of 1934, as amended, defines intrastate communications as communications originating and terminating in the same state. 47 U.S.C. §153(28)(A) and (C) Section 3(28)(A), 47 U.S.C. §153(28)(A), defines “interstate communications” as communications originating and terminating in different states. Section 3(28)(C) , 47 U.S.C. §153(28)(A), excepts from the definition of “interstate communications,” “wire or radio communication between points in the same State, Territory, or possession of the United States, or the District of Columbia, through any place outside thereof, if such communication is regulated by a State commission.”

Thus, calls which originate and terminate in the same state are intrastate calls. *See NARUC v. F.C.C.*, supra. 9-1-1 calls are intrastate communications because they originate and terminate in the same jurisdiction. This applies to wireline, wireless and fixed VoIP calls. Nor are states preempted from regulating non-rate and non-entry aspects of wireless services. 47 U.S.C. 332(c)(3)(A). *WWC Holding Co. v. Sopkin*, 488 F.3d 1262, 1274 (10th Cir. 2007).

With respect to VoIP service, however, the Commission initially preempted regulation of nomadic VoIP 9-1-1 traffic by the Minnesota Public Utilities Commission, finding it impossible

to identify the origination and termination points of nomadic VoIP calls. *Vonage Holdings Corporation*, 19 FCC Rcd. 22404 (2004)(“*Vonage Preemption Order*”).

There is, quite simply, no practical way to sever DigitalVoice into interstate and intrastate communications that enables the Minnesota Vonage Order to apply only to intrastate calling functionalities without also reaching the interstate aspects of DigitalVoice, nor is there any way for Vonage to choose to avoid violating that order if it continues to offer DigitalVoice anywhere in the world. Thus, to whatever extent, if any, DigitalVoice includes an intrastate component, because of the impossibility of separating out such a component, we must preempt the Minnesota Vonage Order because it outright conflicts with federal rules and policies governing interstate DigitalVoice communications.

Id. Para. 31 at 22423-4. In affirming the *Vonage Preemption Order*, the Eighth Circuit rejected arguments that a subsequent Commission decision mandating that VoIP providers implement a means of identifying the location of callers so that 9-1-1 calls could be routed to the appropriate PSAP subjected nomadic 9-1-1 calls to state authority,¹⁸ on the grounds that the method implemented by the Commission was temporary and did not detect automatically the location of nomadic VoIP callers. *Minn. Pub. Utils. Comm’n v FCC*, 483, F.3d 570, 579 (8th Cir. 2007). The 8th Circuit also noted the Commission’s holding in *Universal Serv. Contribution Methodology*, 21 F.C.C.R. 7518 at 7546 ¶ 56 (2006), that should a VoIP provider develop a capability to identify the geographic location of nomadic VoIP user, Commission’s preemption of state authority no longer apply. *Minn. Pub. Utils. Comm’n v FCC*, *supra*, 483, F.3d at 580.

The *Vonage Preemption Order* concerned nomadic VoIP service. Comcast previously provided E9-1-1 service for its VoIP subscribers in Colorado in the same manner as LECs, entering their telephone numbers into the 9-1-1 Selective Routers and entering their telephone numbers and associated service addresses in the ANI/ALI database. While Comcast has more recently changed the way in which it provides E9-1-1 service for its customers to utilize p-ANIs and shell records, Comcast must maintain a database of customer numbers and associated service

¹⁸ *In Re IP-Enabled Servs. & E911 Requirements for IP-Enabled Service Providers*, 20 F.C.C.R. 10245 (2005).

addresses for purposes of routing 9-1-1 calls and populating the shell records in the ANI/ALI database. At least one state has specifically found that a provider of fixed VoIP service has the ability to discern where calls originate. *In re Investigation into Regulation of Voice Over Internet Protocol Servs.*, 2013 VT 23, ¶ 20, 193 Vt. 439, 449, 70 A.3d 997, 1005 (2013).

With respect to nomadic VoIP, BRETSA respectfully submits that it is time the Commission ended its preemption of state regulation of nomadic VoIP 9-1-1 based upon the impossibility exception. The *Vonage Preemption Order* was adopted eleven years ago. In the interim, the Commission has adopted rules requiring wireless providers to significantly improve location accuracy, and to require text messaging providers to make text-to-911 available which necessarily requires identification of the sender's location. Surely the capability of determining the location of nomadic VoIP users dialing 9-1-1 should now be feasible.

BRETSA notes in this regard that in the *Vonage Preemption Order*, the Commission declined to require nomadic VoIP providers to incur the costs of developing the ability to determine nomadic caller's locations "just for regulatory purposes," and where the provider "had no service-driven reason to incorporate such capability into its operations." *Vonage Preemption Order*, supra, 19 FCC Rcd. at 22423-24. See, also, *Minn. Pub. Utils. Comm'n v FCC*, supra, 483, F.3d at 578. Here, however, E9-1-1 service is an essential component of telephone services, and location information is required both for routing of 9-1-1 calls to the appropriate PSAP, and in some cases for dispatch of First Responders. The service-driven reason for providers of nomadic VoIP services developing the ability to determine caller locations is to accurately route 9-1-1 calls and provide accurate caller locations to PSAPs, just as with wireless 9-1-1. The Commission cannot rationally require that text and wireless providers continue to invest sums to improve the accuracy with which caller locations are automatically identified, while giving VoIP

providers a pass. Nor should the Commission rely upon this disparate treatment of 9-1-1 services as provided to nomadic VoIP subscribers to bootstrap a takeover from the states of jurisdiction over 9-1-1.

Finally, 47 U.S.C. §615 directs the Commission to “encourage and support” state efforts to deploy emergency communications infrastructure and programs, not *supplant* state efforts.

VII. Conclusion.

The Commission can seek to accomplish a federal take-over of public safety through control of PSAPs, and assure through consolidation and centralization of PSAPs that any outages or failures have wide-spread impacts. Alternatively, the Commission can empower a more robust and effective emergency response system tailored to local conditions and economies through a network of IP-connected local PSAPs, *as directed by the states*. BRETSA strongly urges the Commission to adopt the latter course.

Respectfully submitted,

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