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        STRENGTHENING COMMUNICATIONS NETWORKS
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        TO HELP AMERICANS IN CRISIS
        THURSDAY, FEBRUARY 27, 2020
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        House of Representatives
        Subcommittee on Communications and
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        Technology
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        Committee on Energy and Commerce
        Washington, D.C.
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             The subcommittee met, pursuant to call, at 10:30 a.m., in
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        Room 2322 Rayburn House Office Building, Hon. Mike Doyle [chairman
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        of the subcommittee] presiding.
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             Members present: Representatives Doyle, McNerney, Clarke,
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        Loebsack, Veasey, Soto, O'Halleran, Eshoo, Matsui, Schrader,
        Cardenas, Dingell, Pallone (ex officio), Olson, Kinzinger,
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23
        Bilirakis, Johnson, Flores, Brooks, Walberg, Gianforte, and
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Walden (ex officio). 24 25 Also Present: Representative Engel. Staff present: AJ Brown, Counsel; Parul Desai, FCC Detailee; 26 27 Evan Gilbert, Press Assistant; Waverly Gordon, Deputy Chief Counsel; Alex Hoehn-Saric, Chief Counsel, C&T; Zach Kahan, 28 Outreach and Member Service Coordinator; Jerry Leverich, Senior 29 Counsel; Dan Miller, Junior Professional Staff Member; Phil 30 Murphy, Policy Coordinator; Alivia Roberts, Press Assistant; Tim 31 32 Robinson, Chief Counsel; Chloe Rodriguez, Policy Analyst; William Clutterbuck, Minority Staff Assistant; Michael Engel, Minority 33 Detailee, C&T; Peter Kielty, Minority General Counsel; Kate 34 O'Connor, Minority Chief Counsel, C&T; and Evan Viau, Minority 35 Professional Staff Member, C&T. 36

Mr. Doyle. The committee will now come to order. 37 The chair will now recognize himself 5 minutes for an opening 38 I want to thank our witnesses for appearing before 39 statement. us today to discuss a range of legislative proposals intended 40 to address challenges facing the American people and those 41 responsible for helping them in times of crisis. The bills before 42 the subcommittee today include Chairman Pallone and Mr. 43 McNerney's RESILIENT Networks Act; Ms. Eshoo's WIRED Act; the 44 45 READI Act introduced by Mr. McNerney, Mr. Bilirakis, and Mr. Olson; Mr. Engel's Don't Break Up the T-Band Act; Ms. Matusi's 46 and Ms. Eshoo's Emergency Reporting Act; Mr. Thompson's PHONE 47 Act; Mr. Moulton and Mr. Stewart's National Suicide Hotline 48 49 Designation Act; and Ranking Member Walden's FIRST RESPONDER Act. [The Bills, Resolutions, and Amendments en bloc follow:] 50 51 52 \*\*\*\*\*\*\*\*\*INSERT 1\*\*\*\*\*\*

Mr. Doyle. In the last few years, resiliency has taken on a new meaning. Our Nation has faced a surge of extreme weather events from Super Storm Sandy in New Jersey and New York to severe hurricanes in Puerto Rico, the Gulf, and the southern eastern United States.

Puerto Rico, in particular, has been hit hard with multiple hurricanes. In this most recent earthquake, thousands of people lost their lives and they are still struggling to reconnect critical infrastructure. The Federal Government simply has not done enough. We must do better for the people there.

In California, people have seen their State ravaged by some of the first wildfires in history. These fires haven't just burned down homes, they have destroyed whole communities. In the Midwest, communities have experienced record flooding and crop losses.

More and more exception weather events that used to occur once in a generation are becoming a regular occurrence.

Human-caused climate change is driving the shift in our weather patterns and, while we work to combat even worse effects in the future, we need to deal with this new normal now.

Our Nation's communications infrastructure is a lifeline to those facing exigent circumstances and it needs to be ready to take on the challenges we know it will face, whether that be

fires, floods, Category 5 winds, or 9-1-1 call centers outages, a public safety emergency in a major city, or a personal crisis that could cost someone their life. In each case, communication networks that are ready and resilient to the challenges we know they will face can be the difference between life and death.

It is my hope that, as we examine legislation before us today, we can come together and find common ground because, while each of our districts has some unique challenges, we can all acknowledge that our communities are safer and stronger when folks can communicate with each other and access the resources they need in an emergency.

With that, I would like to yield a minute to my good friend Mr. McNerney. And then after his minute, a minute to Ms. Eshoo.

Mr. McNerney. Well I thank the chairman for holding this hearing and for yielding a minute to me.

This year, we are witnessing the driest February on record in much of Northern California, which is where my district is located. As experts warn about the possibility of early and more intense wildfire season, it is imperative that we help individuals stay connected during these natural disasters.

This situation is, in part, why I have introduced H.R. 5926, the RESILIENT Networks Act with Chairman Pallone. This legislation would make critical improvements to the reliability

of our communications network.

I have also introduced H.R. 4856, the READI Act, with my colleagues, Mr. Bilirakis and Mr. Olson. This legislation would help ensure that we have a robust wireless emergency alerting system.

Additionally, I have asked the chairman of the FCC to hold a hearing in Northern California to examine the cell tower outages that occurred during the recent wildfires. Chairman Pai committed to me that he would hold this hearing. I look forward to hearing from him about the details of when and where it will be held.

And now I yield to my colleague, Ms. Eshoo.

Ms. Eshoo. I thank the gentleman and I thank you, Chairman Doyle, for not only yielding time but for also holding this very important meeting.

On October 28th of last year, 874 cell towers were out in California, caused by wildfires and power shut-offs. My constituents were worried sick that they wouldn't be able to call 911 during emergencies, receive emergency alerts, or download public safety information. Our wildfires are getting more intense because of climate change and PG&E, the major utility, estimates that shut-offs will impact nearly two million Californians this year.

| 122   | So without real changes, I really worry that our telecom           |
|-------|--|
| 123   | problem will, once again, worsen the impacts of these disasters    |
| 124   | and it is why I have introduced the WIRED Act, which clarifies     |
| 125   | that States can require carriers to take measures to make wireless |
| 126   | infrastructure more resilient to disasters, such as requiring      |
| 127   | backup power. We have to have this and the ambiguities in the      |
| 128   | law today are cleared away by this legislation.                    |
| 129   | I am grateful that we are also considering Congresswoman           |
| 130   | Matsui's bill, which I am proud to be an original co-sponsor of    |
| 131   |  |
| 132   | And I look forward to a very productive hearing. I than            |
| 133   | all the witnesses.   |
| 134   | And Mr. Chairman, thank you for grouping these bills and           |
| 135   | having the hearing so that they can move on. These bills,          |
| 136   | collectively, are going to make a real difference in the lives     |
| 137   | of Californians and others across the country.                     |
| 138   | And I yield back.  |
| 139   | Mr. Doyle. I thank the gentlelady.                                 |
| L40   | The chair now recognizes Mr. Latta, the ranking member for         |
| 141   | the subcommittee, for his opening statement.                       |
| 142   | Mr. Latta. Well, thank you, Mr. Chairman, and I really             |
| 143   | appreciate you holding today's hearing. And good morning and       |
| 1 1 1 |  |

145 safety-related legislation.

I also want to thank our witnesses for sharing their experiences with us on dealing with the day-to-day challenges associated with the concepts of these legislative proposals. So thanks again for being here.

Public safety communications provide an important lifeline to consumers and, as we make advances in technology, we must be careful to make sure transitions are done thoughtfully, are transparent, and have public input.

While many of the bills before us have good intentions to improve the resiliency of our emergency communications systems, we must ensure that these bills receive proper attention so their goals are achieved.

First, the subcommittee is examining H.R. 1289, the PHONE Act, which will provide a moratorium on number reassignment after a natural disaster. I believe we can all agree that consumers should lose their phone number after their home is destroyed from a fire or a hurricane but remedy we use to protect consumers must be manageable for companies that provide voice service to tens of millions of consumers. Without taking that into account, we could cause more confusion for Americans already reeling from disasters.

If there a concern with the Commission's current process

for obtaining a waiver of the Aging Rule, that is something we should study.

I believe that these and other challenges can be overcome and I am committed to working with my friends in the majority to see if there is a path forward. However, I caution you against moving such important legislation without due consideration under regular order.

I am pleased that we are considering the FIRST RESPONDER Act, which repeals the T-Band auction mandate, while addressing the issue of 911 fee diversion by States, as well as my colleague from New York's bill, Don't Break Up the T-Band Act. These bills address critical bipartisan issues that, if not addressed, put the entire 911 and public safety system at risk.

We will also discuss H.R. 4194, the National Suicide Hotline Designation Act. Last Congress, this committee unanimously passed the National Suicide Hotline Improvement Act, which tasked the FCC with studying whether to designate an n-1-1 three-digit short code for a National Suicide Prevention Lifeline. Chairman Pai has announced his intention to move forward on designating 9-8-8 and I applaud this decision.

And I was pleased to host the chairman recently in Toledo,
Ohio at a visit of the Rescue, Mental Health, and Addiction
Services, a National Suicide Prevention Lifeline Crisis Center.

At the Center, we learned the number of hotline calls that needed

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192 answering in Ohio increased by 70 percent from 2016 to 2018. 193 With suicide rates growing at an alarming rate across our Nation, 194 we need to make sure that the prevention services are there and 195 they have never been needed more than they are needed today. 196 We must ensure resources like 9-8-8 are available for at-risk 197 Americans to get the help they need. And Mr. Chairman, with that, I appreciate you holding today's 198 199 hearing and thank our witnesses for being here to testify today. 200 And I will yield back the balance of my time. 201 Mr. Doyle. I thank the gentleman. 202 The chair now recognizes Mr. Pallone, chairman of the full committee for 5 minutes for his opening statement. 203 204 The Chairman. Thank you, Mr. Chairman. 205 Today, the subcommittee is considering a number of important 206 bills to improve communication networks, particularly in times 207 of emergency. The fact is that climate change is causing more 208 frequent and more severe disasters; and a functioning 209 communications network can be the difference between life and 210 death in these situations. And we have a responsibility to ensure 211 our networks are prepared for this stark reality. 212 One of the bills we are considering today is the RESILIENT 213 Networks Act, which I introduced with Representative McNerney.

| 214 | This legislation picks up where the SANDy Act left off and will   |
|-----|---|
| 215 | ensure that communication networks are prepared for the worst     |
| 216 | when disaster strikes.  |
| 217 | When networks go down, it is critical that providers share        |
| 218 | information about outages and restoration efforts with 9-1-1 Call |
| 219 | Centers and first responders. They need access to outage reports  |
| 220 | to better keep us safe.   |
| 221 | And I want to thank the Association of Public Safety              |
| 222 | Communications officials for letting us know about the need to    |
| 223 | address this issue. And I would like to request unanimous consent |
| 224 | to enter a letter from APCO into the record, Mr. Chairman.        |
| 225 | Mr. Doyle. Without objection, so ordered.                         |
| 226 | [The information follows:]  |
| 227 |   |
| 228 | **************************************                            |

The Chairman. Thank you.

So the bill the RESILIENT Networks Act also makes certain that providers have pre-planned roaming agreements and mutual aid agreements in place ahead of time. This coordination can mean the difference between life and death. When a storm or wildfire strikes, it is essential that people can still make calls to 9-1-1 or to loved ones. Service is also critical to receiving emergency alerts that providing life-saving information.

In an instance where one carrier's network is working and another goes down, having a plan in place beforehand to seamlessly transition subscribers onto the working network is common sense and can save lives.

Perhaps the most frustrating challenge of all is outages that happen during the recovery phase, after storms or disasters have passed. Far too many networks go down due to accidental cuts into the networks when restoration efforts are well underway. And our bill directs the FCC to examine ways to stop these preventable outages and I look forward to seeing the result of their analysis.

I am also pleased that the National Suicide Hotline

Designation Act is listed for consideration today and thank

Representative Stewart Moulton and Eddie Bernice Johnson for

their leadership on this issue. Every day the National Suicide

Prevention Lifeline saves lives. And reports from the Substance Abuse and Mental Health Service Administration, and the FCC, say that making 9-8-8 the dialing code for the Lifeline will save more lives. This bill will make it easier for people experiencing a mental health crisis to access help.

In my State of New Jersey, a hundred young people aged 15 to 24 died by suicide in 2017, the highest number and rate since the 1990s. Tragically, rates are climbing across the board at the national level, too. The statistics are particularly alarming for LGBTQ youth, who are four times more likely to attempt suicide than their peers.

According to the Trevor Project's National Survey, 30 percent of LGBTQ youth seriously considered attempting suicide in the past year, including more than half of transgender or nonbinary youth, and it is vital that we do all we can to turn these trends.

And finally, I wanted to thank our Ranking Member Walden and Representatives Engle, Eshoo, McNerney, Matsui, and Thompson for their important work on other bills being considered today.

And I wanted to yield the remainder of my time to Representative Matsui, Mr. Chairman.

Ms. Matsui. Thank you very much, Mr. Chairman, for yielding and Chairman Doyle for holding this important timely hearing.

The natural disasters we will examine at today's hearing were, just a few years ago, irregularities, unavoidable but uncommon events. Today, these once-in-a-generation storms and fires have become all too common occurrence.

In 2019 alone, wildfires in California damaged or destroyed 732 structures and burned almost 260,000 acres. Worst of all, three lives were lost. As destructive as these fires were, we know that they are not an anomaly. Wildfire season is getting longer. Wildfire incidents are becoming more common and their intensity is increasing.

In the face of this evolving threat, we must adapt -- adopt a holistic approach, one that addresses environmental, economic, and human factors that contribute to our changing climate.

Additionally, as we will discuss at this hearing, we need to take immediate steps to ensure our networks can perform as intended during emergencies. The shortcomings are network performance were laid bare by Hurricane Maria, the Thomas Fire, and Superstorm Sandy. This committee has an obligation to move quickly and collaboratively to advance legislation that will help prepare our country for the natural disasters of tomorrow. That is why I worked with my colleagues, Representative Eshoo, Thompson, and Huffman to introduce the Emergency Reporting Act. This bill would establish a standardized emergency reporting

298 process at the FCC and improve standards that require mobile 299 carriers to report network messages to 9-1-1 Centers. 300 The FCC needs to do a better job in response to crises. 301 My bill will ensure that the FCC conducts field hearings, issues 302 reports, and makes policy recommendations on all major disasters, 303 regardless of their location so no community would again be left 304 wondering: What can we do to better prepare for the next one? It would also improve the flow of information to 9-1-1305 306 Centers when there are network outages in their service territory 307 that prevent consumers from completing 9-1-1 calls or when the emergency calls do not include vital information like location 308 309 or number data. 310 While existing outage reporting requirements exist at the 311 FCC, the notification threshold is high and can lead to situations 312 in which 9-1-1 Centers are left in the dark by service outages 313 in their territory, jeopardizing public safety. 314 With that, I yield back. 315 Mr. Doyle. The gentlelady yields back. 316 The chair now recognizes Mr. Walden, ranking member of the 317 full committee for his opening statement. 318 Mr. Walden. Good morning, Mr. Chairman. 319 Mr. Doyle. Good morning. 320 Mr. Walden. And I want to welcome our witnesses and guests

321 today.

I just want to say on these wildfires, we have been facing this in the northwest for a long time. I was just looking it up. In 1910 was the giant fire in Idaho that burned I think something like three million acres and took 86 lives, mostly firefighters on the front lines.

So this is something some of us have been dealing with for a long time. Yes, it is getting worse. Yes, climate change is impacting it. But we have got to do work to get our forest back in balance and get the excess fuel loads out and we need your help to do that on both sides of aisle. We have got legislation to do that in the Resilient Forests Act. And then we need to replant. And we have a Trillion Trees project that I think can make a real difference for the ecology, and trees for our lungs, and the world's lungs, and can take and return oxygen to the environment. We need to do that, too.

And we need to make our networks resilient. I was in the radio business for 20 years. I have covered a lot of fires.

I have worked closely with emergency personnel. I have been on the scenes of fires and accidents. And I have been out making my own generator work at my radio station when it would go out.

I have turned tower lights on in the middle of the day so rescue helicopters in fog could land at the nearby hospital. This is

really important work but we have to get it right and that is why we look forward to working with you on the RESILIENT Act but we need to get it right.

You know the RESILIENT Networks Act put forth by the chairman, I appreciate his work on it. I know it has been a focus of his and others for a long time, especially since Superstorm Sandy.

Now we did include his SANDy Act and the RAY BAUM'S Act in the last Congress, when I chaired the committee. This addressed the complicated issues we examined and we did it in a bipartisan and timely way.

The RESILIENT Networks Act attempts to address concerns related to making sure wireless networks are restored in a timely and efficient manner during times of emergency but this bill has not seen -- been through the kind of examination I think, Mr. Chairman, it really deserves and needs. It is a very important topic and we have got to get it right.

I commend the chairman for taking initial steps to examine these issues in depth. In October of 2019, Chairman Pallone requested a GAO study to investigate and evaluate the failures in response to restoring communications in Puerto Rico after the devastating hurricane to see what happened during that crisis and what can be improved. Without objection, I would like to

| 367 | offer his letter for the record, Mr. Chairman. We have not yet |
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| 368 | seen the results of this                                       |
| 369 | Mr. Doyle. So ordered.   |
| 370 | [The information follows:]                                     |
| 371 |  |
| 372 | *********COMMITTEE INSERT******                                |

Mr. Walden. Thank you -- the study which may inform how Congress could address the issues contemplated in the RESILIENT Networks Act. So we should -- we asked for the information so we could learn what to get right and I wish we would wait to act until we get that.

The FCC is also taking steps to address these issues. In fact, the Commission is voting tomorrow on an item to provide State and Federal agencies with access to outage data. In many cases, having access to wireless communications during a natural disaster can save lives. So Mr. Chairman, it is important that we get this policy right.

As we will hear today, the wireless industry has made some great strides, over the last several years, to expand their Wireless Resiliency Cooperative Framework, which is a voluntary process to enhance coordination in times of an emergency. This Framework must remain flexible so we can allow best practices and lessons learned to evolve without creating unnecessary barriers to restoration. Every disaster is different. I have seen that firsthand. So communications providers and their partners need sufficient flexibility to adapt to specific situations.

States are also at the forefront in a lot of this work, as we have seen with wildfires out west in Oregon or the tragic ones

in California. As you know, State regulators have jurisdiction over electric distribution. We must be mindful of how they are addressing this issue so we do not disrupt those efforts with heavy federal regulations and we must also be mindful to not extend the Federal Communications Commission's jurisdiction to include the electric distribution or transmission system, where they have no relevant expertise. But we cannot talk about the importance of the resiliency of the 9-1-1 system, while turning a blind eye to the flagrant and obvious attempts to undermine the system's integrity and, dare I say, resiliency.

That is why I am also pleased to discuss the FIRST RESPONDER Act today. Over the last several years, I have sought to find a consensus solution to the T-Band auction mandate that was included in the 2012 Spectrum Act and address related issues, including the efficient use of public safety spectrum and diversion of 9-1-1 fees.

The FIRST RESPONDER Act would repeal the T-Band auction mandate and include strong provisions to address the shameful acts by some States of diverting 9-1-1 fees intended for the maintenance and upgrade to Next Generation 9-1-1. While some States may not have clear understanding of what is a 9-1-1 expenditure, other State politicians have made a more conscious decision to diver 9-1-1 fees to spend the money on pet projects

419 unrelated to public policy. 420 So the FIRST RESPONDER Act addresses both concerns and give well-intentioned States clarity on how to prevent 9-1-1 fee 421 422 diversion in the future but also would take steps to investigate 423 whether criminal penalties or other tools could end the shameful practice of fee diversion by the worst offenders. 424 425 So with that, Mr. Chairman, I will just conclude by saying we should also keep in mind the role of ham radio operators. 426 427 I may be one of the few in the Congress. It is actually an amateur 428 radio operators but I have seen them play a key role in emergency situations, too, when everything else fails. 429 430 So with that, I yield back.

Mr. Doyle. The gentleman yields back.

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The chair would like to remind members that, pursuant to committee rules, all members' written opening statements shall be made part of the record.

So I would now like to introduce our witnesses for today's hearing: Ms. Sue Ann Atkerson, CEO of Behavioral Health Link; Mr. Daniel Henry, Regulatory Counsel and director of Government Affairs, National Emergency Number Association; Mr. Allen Bell, Distribution Manager, Georgia Power Company; Mr. Anthony Gossner, Fire Chief, City of Santa Rosa, California; Mr. Matthew Gerst, Vice President, Regulatory Affairs for CTIA; and last but not

442 least, Mr. Joseph Torres, Senior Director of Strategy and Engagement, Free Press and Free Press Action. 443 444 We want to thank all of our witnesses for joining us today. We look forward to your testimony. 445 446 At this time, the chair will recognize each witness for 5 minutes to provide their opening statements but, before we begin, 447 448 I would like to explain the lighting system. In front of you is a series of lights. The light will initially be green. 449 450 light will turn yellow when you have 1 minute remaining. Please wrap up your testimony at that point. The light will turn red 451 when your time has expired and, if you keep talking, a trap door 452 453 will open under your seat and whisk you away. 454 So with that admonishment, Ms. Atkerson, you are recognized 455 for 5 minutes.

STATEMENTS OF SUE ANN ATKERSON, CEO, BEHAVIORAL HEALTH LINK;

DANIEL HENRY, REGULATORY COUNSEL AND DIRECTOR OF GOVERNMENT

AFFAIRS, NATIONAL EMERGENCY NUMBER ASSOCIATION; ALLEN BELL,

DISTRIBUTION MANAGER, GEORGIA POWER COMPANY; ANTHONY GOSSNER,

FIRE CHIEF, CITY OF SANTA ROSA, CALIFORNIA; MATTHEW GERST, VICE

PRESIDENT, REGULATORY AFFAIRS, CTIA; AND JOSEPH TORRES, SENIOR

DIRECTOR OF STRATEGY AND ENGAGEMENT, FREE PRESS AND FREE PRESS

ACTION

## STATEMENT OF SUE ANN ATKERSON

Ms. Atkerson. Thank you and good morning, Chairman.

Mr. Doyle. Can you pull your microphone up closer to you,

please? Yes.

Ms. Atkerson. Sure. Thank you. Good morning, Chairman Doyle, Ranking Member Latta, and members of the committee. Thank you for inviting me today and for your leadership in strengthening the country's suicide prevention and crisis care services.

By designating 9-8-8 as the dialing code for suicide prevention services, the bipartisan National Suicide Hotline Designation Act, H.R. 4194 is a historic step toward saving more American lives and I should know. My name is Sue Ann Atkerson and I have spent more than 25 years working to prevent suicide. I am the CEO of Behavioral Health Link in Atlanta, Georgia and

COO for RI International based in Phoenix, Arizona. BHL provides a 24/7 community-based call center hub and mobile outreach and RI International offers facility-based crisis services in eight States. Working together, these programs deliver a full continuum of best practice crisis service care.

I have three points to share today: one, suicide is a leading cause of death in the United States; two, faster access to the National Suicide Prevention Lifeline will save lives; and three, funding and specialized services are essential for success.

Before I go into detail on these, I want to share a story that illustrates why we are all here today: Misha Kessler. The 9-8-8 code is precisely what Misha Kessler, a now mental health advocate from Ohio, needed when he experienced suicidal ideation as a sophomore at George Washington University. During a particularly difficult time, he planned to jump out of his sixth-floor dorm window to his death. Without other options, Misha ended up in an inpatient psychiatric hospitalization.

Misha's experience would likely have bene different, had 9-8-8 existed. His 9-8-8 call would have been redirected to the Lifeline, where local call centers deescalate 98 percent of calls, getting people the help they need immediately.

The sooner we can intervene to help a person in crisis, the

502 more lives we can save. That is why the 9-8-8 dial code and a fully-funded Lifeline is so important. 503 504 I will begin with some background on the suicide epidemic. Suicide is the tenth leading cause of death of Americans overall 505 506 and the second leading cause of death for people ages 10 to 34. 507 We lost nearly 50,000 Americans to suicide in 2018. Of particular relevance to the chair and ranking member, 508 Pennsylvania ranked fourth in the Nation for suicide deaths and 509 510 Ohio ranked fifth. 511 Some populations are particularly vulnerable to suicide. 512 LGBTQ youth, for example, are four times more likely than their

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Secondly, faster access to the Lifeline will save lives. Research shows that the time between a person deciding to act and attempting suicide can be as short as 5 to 10 minutes. That means there is a critical period for intervention similar to the so-called golden hour of a stroke, meaning that time is of the essence.

heterosexual peers to contemplate suicide and the incidence rates

for transgender youth have skyrocketed in recent years.

Fifty-three years ago, the FCC established 9-1-1, transforming emergency care in this country by making access to trained medical professionals available to anyone, anywhere, anytime. Today, Americans in mental health distress often turn

to our medical system. Landing in overcrowded emergency rooms that are often ill-equipped to address psychiatric needs can lead to delays in accessing appropriate care. When they do get treatment, it comes at a very high cost, not only to the patient but also to taxpayers, in the form of emergency medical services and law enforcement resources.

Adopting 9-8-8 will allow direct immediate access to trained mental health professionals, whose rapid intervention often results in lifesaving actions.

Lastly, funding and specialized services are essential to success. The Lifeline network of accredited crisis centers must be fully funded and well-equipped to handle specialized needs of callers as call volume increases. Estimates indicate the potential for calls to double in the first year, reaching upwards of five million.

Full funding of the Lifeline is critical to success and we will, undoubtedly, need a braided funding approach. This includes giving States the authority to levy fees, such as a service charge revenue through wireless carriers. We also need to strengthen partnerships between the Lifeline and specialty suicide prevention resources. In fact, the Senate companion bill 2661 directs SAMHSA to create an implementation plan for specialized services for LGBTQ youth and other at-risk

| 548 | populations, which could include training crisis counselors and   |
|-----|---|
| 549 | integrated voice response to route calls to specialized           |
| 550 | organizations. We encourage the House of Representatives to       |
| 551 | adopt this language.  |
| 552 | In conclusion, it is the consensus of the mental health           |
| 553 | community, including the operators of the Lifeline, that Congress |
| 554 | should pass H.R. 4194. Providing faster access to a fully-funded  |
| 555 | Lifeline network, with specialized services for our most at-risk  |
| 556 | populations, will save American lives.                            |
| 557 | Thank you.  |
| 558 | [The prepared statement of Ms. Atkerson follows:]                 |
| 559 |   |
| 560 | *********INSERT 2******   |

Mr. Doyle. Thank you very much.

Mr. Henry, you are now recognized for 5 minutes.

## STATEMENT OF DANIEL HENRY

Mr. Henry. Chairman Pallone, Chairman Doyle, Ranking Member Walden, Ranking Member Latta, and members of the committee, thank you for the opportunity to testify before you today.

My name is Daniel Henry. I am Regulatory Counsel and Director of Government Affairs for NENA, The 9-1-1 Association. With over 16,000 members across the United States, NENA is the leading professional association in the 9-1-1 space.

Thanks also to the members of the Congressional NextGen 9-1-1 Caucus, including co-chairs Representatives Eshoo and Shimkus, as well as many other members of this committee, including Chairman Pallone and Chairman Doyle. We appreciate your support.

Built in the days of copper landline trunks, 9-1-1 now answers around 80 percent of its 300 million annual calls from mobile phones, most of them smartphones with advanced location and data-sharing capabilities. Unfortunately, America's 9-1-1 system is still years behind the smartphone revolution.

Modernizing it faces four perennial challenges: decentralized governance, inadequate and inconsistent funding, human resources challenges, and evolving technology.

Public Safety Answering Points or PSAPs vary widely from community to community, as noted. Each of these settings has

its own unique needs, conventions, technology, and funding models. It would be impossible to impose a single cookie cutter model for 9-1-1 in every jurisdiction in the United States.

With varied governance comes varied funding means. While 9-1-1 fees are traditionally levied as line items on subscriber phone bills, funding models also vary. In some cases, they are uniform statewide fees. In others, counties levy the fees.

Regardless of how the money is collected, adequate funding streams are required for both technology upgrades and for daily operations of 9-1-1.

What constitutes an allowable 9-1-1 expenditure also varies from one State to the next. While one State may define anything within the walls of the PSAP as 9-1-1 spending, another may extend that definition to all kinds of public safety equipment.

More challenging still is some States' practice of diverting funds collected through 9-1-1 fees to unrelated issues.

According to data collected by the FCC, in 2018 alone, five States diverted a total of \$187 million in consumer-paid 9-1-1 fees.

Most people would agree that, when we pay a 9-1-1 fee, that money should go to 9-1-1. Raids on 9-1-1 funds must cease, both to maintain today's level of service and to accelerate the transition to Next Generation 9-1-1.

Our 9-1-1 system also plays a critical role during disasters

as a primary intake of information to public safety. During Hurricane Harvey, for instance, Houston 9-1-1 processed 75,000 calls during the course of a single weekend, more than four and a half times its normal call volume. In the aggregate, these calls become crowd-sourced intelligence for public safety providing thousands of details in real time and helping authorities stay safe and do their jobs.

The 9-1-1 system also serves as an early warning system for "blue-sky" outages, as was the case in December 2018 when a major nationwide outage was brought to light only by sharply dropping 9-1-1 call volumes. Threats to connectivity are exacerbated in this legacy 9-1-1 environment, where specialized 9-1-1 trunks and selective routers create single points of failure in the network. It is, thus, imperative that these facilities be supported by more reliable frequently tested sources of backup power and connectivity.

It is also crucial that telecommunications providers and 9-1-1 work hand-in-hand to tackle outage reporting and analysis, so that they may work together to address current outages and prevent future ones.

Many of these challenges will be alleviated by the transition to Next Generation 9-1-1, whereas legacy 9-1-1 is based on voice-only 20th century technology. NG is a standards-based

IP-powered system of systems that brings 9-1-1 into the 21st century. To enhance resiliency, NG 9-1-1 will allow for seamless rollover of operations when PSAPs experience an outage or are overwhelmed with calls. It will allow PSAPs to connect to 9-1-1 networks through multiple cost-effect pathways and it will make our 9-1-1 systems more secure and more resilient against cyberattacks. Finally, it will allow for faster upgrades and solutions to problems and innovations as they arise in the marketplace.

The fiscal burden of this transition cannot be borne solely by States and localities alone. The National 9-1-1 Office estimates the NG transition will cost around \$12 billion nationwide, above and beyond the day-to-day operating costs of our current 9-1-1 systems. Industry and public safety have worked together for over a decade to develop the technical and operational standards, governance models, and best practices for Next Generation 9-1-1. It has been tested in numerous real-world environments. In short, 9-1-1 is ready for this transition.

We are deeply grateful, Mr. Chairman, that you and your committee have called this hearing to consider several pieces of legislation to improve America's 9-1-1 systems. We believe that significant improvements can be made soon in practically every community's 9-1-1 systems and that Congress' investment

| 655 | will deliver priceless returns.                              |
|-----|--|
| 656 | We at NENA look forward to working with you and with all     |
| 657 | stakeholders to assure the continued success of 9-1-1 and an |
| 658 | accelerated transition to NG9-1-1.                           |
| 659 | Thank you.   |
| 660 | [The prepared statement of Mr. Henry follows:]               |
| 661 |  |
| 662 | **************************************                       |

Mr. Doyle. Thank you.

Mr. Bell, you are now recognized for 5 minutes.

STATEMENT OF ALLEN BELL

Mr. Bell. Chairman Pallone, Chairman Doyle, Ranking Member Walden, Ranking Member Latta, and members of the subcommittee, thank you for the opportunity to testify this morning.

My name is Allen Bell and I serves as a Distribution Support
Manager for Georgia Power. I am also a member of the FCC's
Broadband Deployment Advisory Committee and serve on its Disaster
Response and Recovery Working Group. I have nearly 3 decades
of experience working disaster response and recovery, and
communications issues in the electric power industry, including
serving 15 years on Georgia's 8-1-1 Board.

Georgia Power is the largest subsidiary of Southern Company, one of the nation's largest generators of electricity. We serve 9 million customers in six States and our communications service provider, Southern Linc, operates over a 127,000 square mile territory covering Georgia, Alabama, southeastern Mississippi, and the Panhandle of Florida.

The electric power industry invests more than \$110 billion a year to modernize the grid. Georgia Power just had more than a billion dollars in grid investment approved by the Georgia Public Service Commission.

I appreciate Chairman Pallone and Congressman McNerney's

leadership by introducing the RESILIENT Networks Act. This is a serious issue that is currently being addressed by a number of voluntary cross-sector efforts. While these efforts should be given the opportunity to be seen through before congressional action, I applaud several of the bill's provisions.

In particular, DOE should be included in recommending best practices for coordination between the two sectors because there are only two electric utility representatives on the BDAC. Communication providers should take responsible measures to integrate backup power into their networks and Emergency Operation Centers already exist to provide appropriate coordination during times of emergency between industry and Government stakeholders. Among the voluntary efforts the BDAC Disaster Response and Recovery Working Group is in the process of finalizing a report that will identify best practices for coordination before, during, and after a disaster.

Additionally, at the request of the FCC, the Edison Electric Institute and the CTIA are establishing a Cross-Sector Resiliency Forum.

With respect to H.R. 5926 it is crucial to acknowledge that most disasters are local, State, or regional events. Therefore, the goal should be to drive all coordination and information-sharing through State or county EOCs. The

unintended consequence of a Federal master directory is that it could have the opposite effect.

Another concern with H.R. 5926 is the consideration of applying the one-call notification system to fiber lines at the Federal level. Rather than duplicate efforts that are already in place in most states, I would recommend assigning fiber optic locators to electric and debris removal crews during storm restoration and evaluating construction practices for critical communication networks to ensure fiber lines are not laid adjacent to electric poles.

Southern's extensive experience with powerful storms, such as Hurricane Michael, demonstrate that hardening, redundancy, and preparedness are keys to improving resiliency. Our primary focus is a safe and quick restoration of power. For some electric customers, including nursing homes and hospitals, electric service restoration and be a matter of life and death. Even while undertaking these restoration efforts, we still coordinated regularly with communications providers at the EOCs. All critical infrastructure providers have a responsibility to use these existing multi-stakeholder processes to improve the resiliency of their systems.

One reason for Southern Linc's ability to maintain and quickly restore operational cell sites is our use of generations

| 734 | and fuel cells. While having an onsite generator at every site  |
|-----|---|
| 735 | may not be feasible, wireless carriers should consider having   |
| 736 | generators at their most critical sites.                        |
| 737 | Another key factor is Southern Linc's use of redundant          |
| 738 | backhaul and transport links for its site. Another key: During  |
| 739 | and immediately after large-scale storm or disaster damage to   |
| 740 | communications fiber is inevitable and should be planned for in |
| 741 | advance.  |
| 742 | In conclusion, we are committed to working with all             |
| 743 | stakeholders to strengthen infrastructure resilience and to     |
| 744 | promote safe, effective disaster response and service           |
| 745 | restoration.  |
| 746 | [The prepared statement of Mr. Bell follows:]                   |
| 747 |   |
| 748 | ************INSERT 4******                                      |

749 Mr. Doyle. Thank you, Mr. Bell.
750 Mr. Gossner, you are recognized for 5 minutes.

751 STATEMENT OF ANTHONY GOSSNER

Mr. Gossner. Good morning, Chairman Doyle, Ranking Member Latta, and members of the subcommittee. My name is Anthony Gossner. I am the Fire Chief for the City of Santa Rosa.

On behalf of Mayor Schwedhelm, Vice Mayor Flemming, and the entire City of Santa Rosa, I would like to express my appreciation for the opportunity to appear before this committee today to discuss the vital role wireless communications and technology play in public safety and emergency situations.

A little over 2 years ago, the City of Santa Rosa, the largest city in Sonoma County and the county seat, experienced what was then the worst wildfire in California's history. Beginning on the night of October 8th, 2017, multiple fires broke out through California's North Bay. In Sonoma County, what were initially five major fires merged into three —— the Tubbs, the Nuns, and the Pocket Fires, collectively known as the Sonoma Complex. IN the span of a few hours, life profoundly changed for tens of thousands of people in Santa Rosa and throughout Sonoma County.

A total of 24 people lost their lives to the fires in Sonoma County, an estimated 100,000 evacuated from their homes, and 43 emergency shelters opened, serving close to 4,162 people at the peak of the operations in Sonoma County.

Property losses were estimated at \$13 billion. More than 3,000 homes, approximately five percent of the city's housing stock, were destroyed, compounding an already severe housing deficit in the county. And for many fire survivors in our community, after losing their homes and personal possessions, lost their ability to communicate with family members, friends, doctors, and others because they lost their landline-associated phone numbers.

We thank Congressman Thompson for introducing the PHONE Act, which will provide a temporary hold on telephone number reassignments after a Federally-declared major disaster and ensure that disaster survivors going through the long and painful process of rebuilding, they will have one less thing to worry about.

The City of Santa Rosa strongly supports the PHONE Act and respectfully requests that this committee pass it quickly, making this critical need available to our communities this fire season and before another natural disaster strikes.

We know that telecommunications infrastructure is not only vital to our residents during and after recovery but it is also critical in how public safety officials respond to wildfires, hurricanes, tornados, and so many other disasters.

The California Governor's Office of Emergency Services

reported that 341 cell sites were offline during the October 2017 northern California wildfires and a combined 489 cell sites were offline during the Camp and Woolsey fires in November of 2018. This prevented wireless users in the impacted areas from being able to call 9-1-1, receive an emergency alert, or use their cell phones to find the safest evacuation route.

Prior to and during the 2019 Kincade fire in Sonoma County, PG&E deenergized major portions of northern California. In Sonoma County, one-quarter of the area's 436 cell phone towers were not functioning. And in nearby Marin County, more than half of the area's 280 towers were out of service due to this strategy.

While wireless infrastructure cannot stop a wildfire, it can and should be hardened to withstand these impacts of similar disasters. Therefore, the City strongly supports the Wireless Infrastructure Resiliency during Emergencies and Disaster Act, the WIRED Act. Sponsored by Congresswoman Eshoo and co-sponsored by Congressman Huffman, the bill gives the States the flexibility and authority to require wireless companies to deploy hardened infrastructure so that wireless networks are more resilient to disasters.

During the Tubbs fire, roughly 70 cell towers were knocked out of service within the first several hours of the fire due to damage, loss of power, or loss of terrestrial communications.

Based on our experience, mandating reasonable requirements, like installation of fail-safe battery backup at cell towers, increasing the number of sites with backup generators, and sufficient fuel to operate for a maximum of 72 hours, requirements for reciprocity between cell providers so that, in the event of cell sites going offline during a disaster, sharing of cellular networks will hopefully be able to maintain at least a minimum level of emergency messaging and support, retrofitting existing cell tower sites, and enhanced vegetation management, and defensible space standards near cell towers could significantly improve our response capabilities.

In addition to hardening the telecommunications infrastructure, our alerting system plays a significant role in protecting people. Even as our recovery is still ongoing, the City has taken critical steps, including commissioning an After-Action Report to identify problems and implement solutions that will make the City more resilient in future disasters.

Our plan incorporate mitigation principles into future infrastructure projects and improves altering systems available for public notifications, alert, warning, and advisories. The alerting systems now available to the City include IPAWS -- and I won't go into detail due to lack of time; SoCo Alert, which is an opt-in system; Hi/Lo Sirens, which are included on all of

our police and fire apparatus; Nixle, which is an information service; and altering and outreach campaigns, which the City has created a robust system to disseminate throughout the City.

The City would also like to acknowledge the work FEMA is doing to update IPAWS to implement enhancements to the WEA System and has been working closely with the City of Santa Rosa and other local governments to deploy Next Generation of WEA technology, which will increase the maximum character from 90 to 360 characters; and support Spanish Language wireless emergency alerts; add two new alert categories, in addition to the presidential, AMBER and Imminent Threat; and enhance geo-targeting reaching 100 percent of the target area with more than one-tenth of a mile overshoot and other improvements.

For these reasons and many others that I won't get into due to time, this is why we support the RESILIENT Networks Act. The City of Santa Rosa is working closely with the whole community, including Government and nonprofit private sector partners to ensure our residents, and first responders, emergency managers have the proper planning, equipment, and personnel to prevent and respond to the next disaster.

Again, thank you for providing me the opportunity to testify today and I look forward to answering any of your questions. Thank you.

| 8 | 366 | [The | prepared  | statement | of | Mr. | Gossner | follows:] |
|---|-----|------|-----------|-----------|----|-----|---------|-----------|
| 8 | 367 |      |           |           |    |     |         |           |
| 8 | 368 | **** | *INSERT 5 | *****     |    |     |         |           |

Mr. Doyle. Thank you.

Mr. Gerst, you are recognized for 5 minutes.

STATEMENT OF MATTHEW GERST

Mr. Gerst. Chairman Pallone, Chairman Doyle, Ranking
Member Walden, Ranking Member Latta, and members of the
subcommittee, on behalf of CTIA and the wireless industry, thank
you for holding this important hearing and your longstanding
leadership of public safety issues.

Each member of this subcommittee has felt the impact of disaster. And in particular, I want to thank Chairman Pallone, who was instrumental in forging a framework in the aftermath of Superstorm Sandy. That framework has encouraged wireless providers to share resources and support each other's customers, all to maintain service and accelerate the recovery from recent disasters for millions of Americans.

Today, we are stronger than we were after Sandy and there is more we can do together to reinforce our networks, our responses, and our performance.

Americans are relying on wireless services more than ever. We reach for our wireless devices to call or text 9-1-1. We use mobile apps to organize rescues. And wireless emergency alerts ring the warning bells that spur us to action. That is why wireless providers prepare, respond, and invest in resiliency.

Over the last decade, the wireless industry has invested \$253 billion to build redundant, diverse, and densified networks. So even if some cell sites go down, providers have fortified large-coverage cell sites to support critical communications. And providers enhance and restore wireless coverage with cell sites on the backs of trucks, that we call COWs, and dedicated teams ready to repair networks and heal communities with chargers and a helping hand.

These investments in resiliency have paid dividends.

Ninety-five percent of cell sites maintained service throughout

Hurricane Harvey. Eighty-one percent of cell sites withstood

the intensity of Hurricane Michael. Ninety-six percent of cell

sites were online while millions of Californians were without

power last year. And just last month, sixty-eight percent of

cell sites withstood a 6.4 magnitude earthquake that knocked out

power across Puerto Rico.

Now these numbers do not diminish the challenges in the hardest hit areas. And wireless providers have applied lessons learned, like burying fiber to avoid damage during hurricane recovery efforts in Florida; hardening towers and cell sites to withstand high winds in Puerto Rico; elevating equipment to avoid flooding in Texas; and diversifying backup power solutions with cabinet-sized batteries and truck-sized generators in

California.

The investments that wireless providers make in time, material, and people to prepare and respond to wildly diverse emergencies have made our networks and our Nation stronger but coordination and communication are also essential to rapidly respond and restore services. In light of recent experiences in Florida and California, wireless providers and electric utilities are taking steps to enhance coordination.

Today, I am pleased to announce that CTIA and the Edison Electric Institute recently agreed to convene our member companies to identifying near-term actions that can improve information sharing and preparedness. We will focus on lessons learned over the last year of hurricane and wildfire events and we will keep this subcommittee apprised of our progress.

Now even as our networks are getting stronger, storms and disaster events are too. This subcommittee is right to ask:

What more can be done to enhance wireless services during emergencies? We support the goals of Chairman Pallone and Representative McNerney's RESILIENT Networks Act. By recognizing that wireless networks are nationwide, that emergency events are local, the bill directs the FCC to set clear expectations for roaming, mutual aid, backup power, and information sharing during disasters.

We look forward to working with the subcommittee to improve the bill's focus on policies that further situational awareness among public safety stakeholders.

We support Representative McNerney's READI Act, which can help ensure that wireless emergency alerts remain a trusted tool by encouraging alert originators to avoid false alerts and harness new capabilities.

And we support Ranking Member Walden's FIRST RESPONDER Act because State and local governments shouldn't undermine public trust and safety by diverting any of the \$2.6 billion in 9-1-1 fees that they collect from wireless consumers every year.

We also support this subcommittee's effort to make it easier to access the National Suicide Prevention Lifeline by implementing 9-8-8. Call centers need sufficient funding to help people in crisis and we need an effective and equitable way to do that.

In closing, we will continue to invest in resiliency and enhance our coordination to make our network stronger. And we will work this subcommittee to set reasonable and flexible expectations that ensure wireless is there when Americans need it most.

Thank you again for the opportunity to testify today. I look forward to your questions.

| 963 | [The prepared statement of Mr. Gerst follows:] |
|-----|--|
| 964 |  |
| 965 | ********************                           |

966 Mr. Doyle. Thank you. 967 Mr. Torres, you are recognized for 5 minutes.

## STATEMENT OF JOSEPH TORRES

Mr. Torres. Chairman Doyle, Ranking Member Latta, Chairman Pallone, Ranking Member Walden, and esteemed members of the subcommittee, thank you for inviting me to testify about the life and death issue of ensuring that communications networks properly serve all people in the United States, especially in times of crisis.

I am the Senior Director of Strategy and Engagement at Free Press and Free Press Action. I am here today on behalf of 1.4 million members in all 50 States, the District of Columbia, and Puerto Rico.

Over the past couple of years, since Hurricanes Irma and Maria struck Puerto Rico in 2017, Free Press has worked with allies to ensure that lawmakers and regulators are crafting policies to rebuild communications in Puerto Rico and to hear directly from Puerto Ricans impacted by the disaster.

I am Puerto Rican and I grew up in New York City. Like so many Puerto Ricans growing up in the States, I often traveled as a kid to the Islands to visit my grandmother. Four of my Free Press colleagues also have their personal connection to Puerto Rico.

Hurricane Maria, a Category 4 storm, knocked out power and

nearly the entire communications network on the Islands. This impacted recovery efforts. FEMA said it struggled to gain situational awareness and assess the status of critical infrastructure, in part, due to Puerto Rico's communication outages.

The president of Puerto Rico's Association of Emergency Managers told the Associated Press the biggest crisis after Maria was communication and that it unleashed an endless number of problems. Between 3,000 and 5,000 people died as a result of Maria, making it one of the worst tragedies in U.S. history. An inability of Puerto Ricans to communicate was a factor in the death toll.

My colleagues and I worked with Puerto Rican activists, when we traveled to Puerto Rico in 2018, to learn how the communication collapse impacted the people's lives. Residents of Vieques and Comerio told us how the lack of communication limited their mobility, left them without knowing where to search for food, water, medical care, and how to reach loved ones, or get information about mudslides. This is why a coalition of Puerto Rican groups and leaders, and racial justice and public interest groups have called on the Federal Communications Commission to conduct an independent investigation into all the factors that contributed to the communication crisis. Well, so far, the FCC

has failed to do so.

In contrast, the FCC did investigate the communication disruptions in the Florida Panhandle following Hurricane Michael, also a Category 4 storm. The Commission found that the lack of coordination among wireless and landline service providers, power crews, and municipalities prolonged the restoration of service. We applauded the Commission for conducting the investigation but we also are troubled by the disparity in treatment when it comes to Puerto Rico. We believe that the longest known communications blackout in modern U.S. history warrants and investigation.

Earlier this month, in a letter to Representative Yvette Clarke, Chairman Pai praised the telecom carriers for applying the lessons they learned after Hurricane Maria to rapidly restore service in areas of Puerto Rico impacted by the recent earthquakes but the lessons the Chairman alludes to have yet to be made public.

Meanwhile, Commissioner Jessica Rosenworcel criticized the Commission last September for not having a clear picture of how telecom companies, who have received Federal funding from the FCC, have spent that money and for not knowing the precise status of communication facilities on the Islands. She called this approach an invitation for waste.

We urge the committee to use its oversight power to ask

|   | Chairman Pai to publicly share the lessons the carriers and the   |
|---|---|
|   | Commission have learned from Hurricane Maria. Puerto Ricans       |
| ) | deserve to know the truth about what happened. They deserve a     |
| ) | comprehensive investigation into all the factors that contributed |
|   | to the communication crisis in Puerto                             |
|   | Rico. They deserve to know the FCC's response and they deserve    |
| 1 | to know the industry's response. Learning about what happened     |
|   | in Puerto Rico is critical to adopting policies to prevent this   |
| , | from happening again, not just in Puerto Rico but everywhere else |
| i | in the country. The intensities of the storms and extreme weather |
| ı | is only increasing damage due to climate change and hurricanes    |
| } | like Maria may become the norm. This is why Free Press Action     |
| ) | is pleased that this committee is considering eight bills that    |
| ı | address various telecom issues, such as resilience, because       |
|   | improving our communications networks following disaster is a     |
|   | matter of life and death.   |
| 1 | Thank you, Chairman.  |
|   | [The prepared statement of Mr. Torres follows:}                   |
| i |   |
|   | **************************************                            |

1057 Mr. Doyle. The gentleman yields back.

We have now concluded our openings. We are going to move to member questions. Each member will have 5 minutes to ask questions of our witnesses.

I will start by recognizing myself for 5 minutes.

Mr. Gossner, when your department responded to the fires in the communities you serve, what were the challenges you and other first responders faced when the communication networks went down for the people who live there?

Mr. Gossner. For us, this was a no-notice event, right?

So it happened very quickly and it impacted a large group of people in both Napa and Sonoma Counties.

One of the things that we tried to use was SoCo Alert, which is a wireless technology to notify our constituents out there to get out of the way. Due to the towers going down, we had up to 70 towers go down early on in the process, the system did not reach everyone, which made us, the Fire Department and law enforcement, both City and Sheriff, go door-to-door. We had to actually active get people out of the way. We could not really fight the fire because we were too busy moving people out of the way.

There were a few instances where we had to put equipment on bigger buildings with a lot of people in it, to make sure that

they survived, but the majority of the crews were out hustling trying to get people out of their houses and just trying to get them out of the way.

And when you have a fire of that magnitude, by the time it hit us, it was you know five miles wide with winds 60-70 miles an hour. It is very difficult to evacuate an area as quickly as it needs going door-to-door.

So it was, without the towers, without the ability to send the wireless alerts, it really hampered our ability to notify the community to tell them to get out of the way.

Mr. Doyle. Yes, we all on this committee want to thank you and your heroic first responders for what you did. That was — it is just hard to imagine the devastation that fire brought on that community.

Mr. Torres, why was it so devastating when communication services went down in Puerto Rico after Hurricane Maria and what did the people lose access to? And also, given the earthquake that just hit the Island, do you think the Islands' communication networks were any better prepared?

Mr. Torres. We would like to know whether that is true or not because the FCC has failed to investigate what happened.

We don't know whether -- like Commissioner Rosenworcel said, we don't know the state of communication facilities. The fact that

31 percent of the wireless outages in Puerto Rico following the
-- it shows that there still needs -- resiliency still needs to
be hardened in Puerto Rico even after Maria.

But we, yes, we just -- we are concerned. Even the inklings, the little break comes that the telecom carriers have said after Maria, telling to their investors, there is questions whether they are going to invest. One company said they are not sure they are going to reinvest. They are going to replace wired lines. They are going to get people wireless instead of giving -- replacing the wired line.

So there is questions. That is the little bit of evidence we have that leaves us concerned that perhaps companies are not going to do everything they can on all different areas of Puerto Rico to restore service the way it originally was prior to it.

Mr. Doyle. Ms. Atkerson, in your testimony, you talked about why it is so important for suicide crisis call centers to have the resources they need to respond to meet the current needs and to deal with the potential influx of calls, when a national three-digit number is implemented. Can you talk about what we risk if these call centers do not have the resources to respond to the calls?

Ms. Atkerson. Sure, absolutely. And just by way of background, the National Suicide Prevention Lifeline is currently

a network of about 170 local call centers scattered in States across the country. And at this time, the funding for those centers is primarily comes from State funding -- or I am sorry -- county and other local funding sources.

There are some States that answer the majority of their calls in-State. When a call center isn't adequately equipped, those calls can be routed to one of the six national backup centers, when a particular call center, depending on changes in volume, becomes overwhelmed. That is not ideal for a number of reasons. We like when people -- when the calls can be answered in the State in which the caller is. They have a better knowledge of the local resources, can connect them more quickly to needed services.

So at this time, there are already States that are struggling to keep up with the volume. When we see an implementation with 9-8-8, we do expect to see a pretty drastic increase in the volume of calls. And the concern is that, if these call centers aren't adequately through a more braided approach, including Federal appropriations, the existing State options, giving States the authority to collect fees from local carriers and their other local sources, that more and more calls will have to be answered out of State.

Mr. Doyle. Thank you.

1149 The chair now recognizes Mr. Latta for questions.

Mr. Latta. And again, Mr. Chairman, thanks very much for holding today's hearing. Again, thanks to our witnesses for being here. We really appreciate your testimony.

And I would like to follow up, Ms. Atkerson, if I may, on what the chairman was just talking about because, again, as I mentioned, I had Chairman Pai in my district in the last week. We were at the Rescue, Mental Health, and Addiction Services, which is one of the many Lifeline call centers across the country. And again, our goal is to make sure we get this deployed as rapidly as possible because, as mentioned, once we get the implementation out there, it is likely to at least double the number of calls that we had in 2018. So we want to make sure that this is done right and get it done so we can be on that front line to make sure that we are helping people and also saving lives.

But if I could just follow up, as we talk about the legislation calling for that implementation deadline in 1 year, what would happen if 9-8-8 was implemented in 1 year and the call centers weren't adequately prepared to handle that influx of calls, especially when we are looking at that massive number that could come in?

I know when I was in Toledo with the Chairman, just seeing how exponentially each year it has been going up. So what would

1172 happen if we didn't have that ready to go? 1173 Ms. Atkerson. And you are correct about that. The Lifeline 1174 actually experiences year-over-year increases of 50 percent -or 15 percent in their calls to the Lifeline without the 9-8-8 1175 1176 legislation. So when we see this drastic uptick in calls, the 1177 primary concern is that callers will -- the calls will go 1178 unanswered. They will have long wait times and hang up or, if 1179 those calls go unanswered in the State in which they are located, 1180 that those will roll to one of these six national backup centers, 1181 which, again, is not ideal because those folks don't have the 1182 local knowledge of the support and resources and can't connect 1183 the caller to emergency services, if needed. 1184 Mr. Latta. Let me follow up with one more. What type of 1185 flexibility, if any, should we have out there during this 1186 transition period? 1187 Ms. Atkerson. Flexibility in? 1188 Mr. Latta. For making sure you know make sure we can get 1189 this done correctly and if you have to have some flexibility in 1190 the implementation. 1191 Ms. Atkerson. Sure. And not being a communications 1192 expert, I do want to say that we fully support the FCC's 1193 recommendation around the timeline and encourage -- we support 1194 Congress to work closely with the FCC, mental health providers,

other key stakeholders, people with lived experience, and the crisis call centers themselves in coming up with an implementation plan that is thoughtful but also rapid.

Mr. Latta. Thank you very much.

Mr. Gerst, if I could turn to you, would you provide an update on how the FCC is expanding the voluntary Wireless Resiliency Framework to include electric utilities and provide better coordination with 9-1-1 call matters?

Mr. Gerst. Sure. Thank you for the question, Congressman.

So I just want to first start by acknowledging the stories we heard and the way that people rely on wireless services during emergency. It is one of the first thing you grab when an emergency happens, whether you are calling 9-1-1, whether you need to receive a wireless emergency alert, whether you are trying to connect with friends or family. And those services, 9-1-1, wireless emergency alerts, they depend on the wireless networks being there and wireless depends on power being there to maintain its services as well.

We have taken steps to make sure that we can maintain our services in the event of significant power outages but we need to enhance our collaboration and coordination. And that is what the FCC has been encouraging us to do.

We do work with the power companies in a number of different

| 1218 | places. As Mr. Bell said, we work in State Emergency Operation   |
|------|--|
| 1219 | Centers. We work at tabletop exercises in-between hurricane and  |
| 1220 | wildfire seasons so that we can try to enhance our coordination. |
| 1221 | And we just announced today that the Edison Electric             |
| 1222 | Institute and CTIA are going to be bringing our member companies |
| 1223 | together in a different way because we know that, even with all  |
| 1224 | those efforts, we have still had challenges after Hurricane      |
| 1225 | Michael in California.   |
| 1226 | So we do think that there is more work that can be done and      |
| 1227 | we are hopeful that this new collaborate effort, this voluntary  |
| 1228 | collaborative effort will help to enhance our capabilities.      |
| 1229 | Mr. Latta. Thank you.  |
| 1230 | Mr. Bell, would you like to follow up on in my last 30           |
| 1231 | seconds on that?   |
| 1232 | Lower your mic, please.  |
| 1233 | Mr. Bell. The Disaster Recovery Group and the BDAC will          |
| 1234 | be issuing a report, hopefully, by the end of March. We are      |
| 1235 | meeting to finalize that this afternoon on ways that the two     |
| 1236 | industries can work together.                                    |
| 1237 | The communication industry has changed over the years. It        |
| 1238 | used to be there were very large bundles of copper that fell on  |
| 1239 | the ground and they worked, even when they were falling on the   |

ground. And typically, the electric utility would go in first,

1240

| 1241 | and the telephone company would follow, and we wouldn't have to     |
|------|---|
| 1242 | be there at the same time.  |
| 1243 | Today, fiberoptic cable carries a whole lot more has a              |
| 1244 | whole lot more capacity than those do and so a break in a fiber     |
| 1245 | optic cable can cause a very significant problem. So the            |
| 1246 | communication industry is there at the same time we are and that    |
| 1247 | is one of the issues we are working through is how do we coordinate |
| 1248 | that effort.  |
| 1249 | Mr. Latta. Well, thank you very much.                               |
| 1250 | And Mr. Chairman, I yield back and thank you for your               |
| 1251 | indulgence.   |
| 1252 | Mr. Doyle. I thank the ranking member.                              |
| 1253 | The chair now recognizes Mr. McNerney for 5 minutes.                |
| 1254 | Mr. McNerney. I thank the chairman for holding this                 |
| 1255 | hearing. I thank the witnesses this morning. I appreciate your      |
| 1256 | testimony, especially Mr. Gossner. I appreciate your work in        |
| 1257 | Santa Rosa and in helping us here in our legislative process.       |
| 1258 | As Fire Chief of the City of Santa Rosa, is wildfire season         |
| 1259 | something that you are worried about only during May to October     |
| 1260 | or has it become a year-round concern?                              |
| 1261 | Mr. Gossner. It is definitely becoming a year-round                 |
| 1262 | concern. We do have a wet season in northern California but I       |
| 1263 | will tell you that our fire seasons start earlier, so a month,      |

month and a half earlier and they are lasting a month to 2 months longer. So while it is not completely year-round, when it is not active firefighting, we are preparing for the next season. So we consider it a year-round endeavor.

Mr. McNerney. Thank you.

In your written testimony, you noted the benefits of installing more fail-safe battery systems at cell towers and increasing the number of sites with backup generators. Can you expand a little bit on how this will help your first responders during emergencies?

Mr. Gossner. Yes, this allows us to communicate with all of our constituents within the city and then it helps with constituents in the county. We work really close with Sonoma County emergency managers so we are always trying to -- how do we make sure we meet our expectations, their expectations that they are notified as quick as they can?

So when you harden a tower, you are not going to be able to harden it against everything but you can harden it to withstand a little bit of a heat threat. You can harden it to stand -- withstand some earthquake. You can harden these resources and have backup batteries or generators that when there is a power outage, due to a power shutoff or for whatever reason, they are up and running and we are able to communicate to our members the

needs that they are going to have to take or the actions that they are going to have to take.

On a no-notice fire, where it takes out numerous cell towers, you can't get the message out and it is deadly, right? So it is one thing I will tell you, we had the Kincade fire in 2019 but we had notice of that fire and we were able to evacuate the City of Healdsburg, the City of -- the Town of Windsor, and a large portion of Sonoma County because we had the ability and time to do it, and we had the resources to do it. Back in 2017, we just didn't because there was too many cell towers that were down.

Mr. McNerney. Thank you.

Mr. Gerst, during the wildfire season this past fall, there were hundreds of cell towers that went down in Contra Costa County, which is part of my district. We lost 88 cell towers. Since that time, when the wildfires took place, what additional investments have members made in backup power capabilities?

Mr. Gerst. Congressman, thank you for the question. And first, again, thank you for your leadership in the RESILIENT Networks Act and the READI Act.

And I want to acknowledge the challenges that your constituents probably faced in the last power-down issues in California, and we are committed to doing better. Two of the

ways that we are going to do that is by enhancing our coordination and collaboration with the electric utilities. That is the main reason for our announcement today with the Edison Electric Institute. We have to do something differently there.

The second thing we are going to do is evaluating our backup power capabilities. We have hundreds of thousands of cell sites throughout the country. We have thousands of cell sites, as you know, throughout California. Each one of them we have to look at a case-by-case basis of what backup power solutions we can have available to us. We are talking about different types of battery sizes, right? We are not talking about the batteries you can go to CVS and get. We are talking about cabinet-size batteries. We are talking about truck-size generators. And those all come with different challenges in how we deploy them.

We are committed to looking at existing cell sites, new cell sites, and diversifying the solutions because, if this is going to be the new normal, we need to maintain service.

Mr. McNerney. Well, good. The RESILIENT Networks Act would ensure that we have the necessary backup power during times of emergency and I hope we can move quickly on this piece of legislation.

Mr. Gossner, again, in your written testimony, you note that when it comes to targeting a WEA alert, knowing that towers --

knowing where the cell towers are located is critical. Did the City of Santa Rosa have access to information about cell tower locations during recent wildfires?

Mr. Gossner. We have general information. So we don't -when I say that, we did some testing. And if you have a -- I
will just use Verizon and AT&T handset, one might go off and the
other one won't because we are hitting a certain tower in that
geofencing. What we really need is where are those towers and
how during an emergency those towers need to cross-communicate
so they hit everyone, not based on your carrier but based on the
emergency.

And so that is, the geofencing wall, it is very big right now and they are going to tighten it down. When I say big, it spills over a great deal and notifies communities that aren't even near the impacted area when you try to target it. So the geotargeting is great, as long as all of the cell towers are, within the system, working as they are supposed to and they communicate with each other in time of need. We can't have one cell tower activated and the other one not because of your carrier. It is an emergency.

And you know it is a touristy area, too. So you have got people from other areas.

1355 Mr. McNerney. I go there.

| 1356 | Mr. Gossner. Yes.   |
|------|---|
| 1357 | Mr. McNerney. So at any rate, Mr. Chairman, before I yield      |
| 1358 | back, I would like to present a letter for the record from PG&E |
| 1359 | about the RESILIENT Act.  |
| 1360 | Mr. Doyle. Without objection, so ordered.                       |
| 1361 | [The information follows:]                                      |
| 1362 |   |
| 1363 | **************************************                          |

1364 Mr. Doyle. The gentleman yields back. The chair now recognizes my good friend from Houston, Mr. 1365 Olson, for 5 minutes. 1366 1367 Mr. Olson. I thank the chair and welcome to our six experts. 1368 Texas 22 is the southwest suburbs of Houston, Texas. Right now, 1369 we have one million people in Texas 22. That makes it the largest 1370 congressional district in America and that growth means problems when a disaster hits, like a hurricane. 1371 1372 We have many monikers about my home area. It is the home of the Imperial Sugar Company. It is called the Energy Capital 1373 1374 of the World. It is called Space City, U.S.A. And it is also 1375 called part of Hurricane Alley. And we will get hit by a hurricane again. It is not a matter of if but when. 1376 1377 We have suffered the worst natural disaster in our country's history, the Galveston Hurricane of 1900, 12,000 people killed 1378 1379 with no chance to know it was coming their way. We had Hurricane 1380 Carla in 1961, the most intense Gulf hurricane ever. We had 1381 Hurricane Alicia in 1983. It wiped out the Texas Medical Center. 1382 We had Hurricane Ike in 2008, which rebounded. The storm surge 1383 came back down Galveston Bay and hit Galveston on the back side. And as you all know, we had Harvey hit us twice in 2017. 1384 1385 A working communication network saves lives during disasters. The system during Harvey was much better than during 1386

Hurricane Ike. We had real-time information about tornadoes that popped up, about roads that were impassible, about routes to get away from your home that may be flooded, where gas stations were open, grocery stores were open. That information saved lives.

So my question is for you, Mr. Gerst, if you want to add in Mr. Henry, is I support a robust disaster information reporting system for carriers, broadcasters, and cable providers so they can report their operational status during these emergencies but currently, the system is voluntary and certain information is kept confidential. Why is that the case for the communications industry, in particular?

Mr. Gerst. Congressman, thank you very much for the question and acknowledging the challenges that increasing severity and intensity of these storms are going to present, particularly for your area.

We were actually very proud of the experience of Hurricane Harvey in terms of the availability of services. Ninety-six percent of cell sites were up, 300 wireless emergency alerts, 96,000 9-1-1 calls made, people organizing themselves for rescues.

In other emergencies -- in all emergencies it is important for first responders and public safety stakeholders to have information about the status of communication networks so that

they can better prioritize where their resources are going to go. That data about cell tower information, though, is both competitively sensitive and, potentially, a national security threat in terms of how it is exposed. We are committed to working with the FCC, with this committee, with stakeholders to identify ways to expand access to that information in a way that can protect that information.

Just tomorrow, we expect that the FCC is going to be opening up a new public meeting that will be talking about that exact issue and we look forward to a robust record developing there.

And we think that there will be some new information gained by engaging with stakeholders there. But we are absolutely committed to enhancing information sharing with public safety stakeholders.

Mr. Olson. Thank you. Mr. Henry, any comments on the question, sir?

Mr. Henry. Yes. And first, thank you for the question and for the opportunity -- excuse me -- to discuss this. We share sentiments with CTIA on this that we really do need a more robust information flow going to and from public safety.

I think the only thing that I would like to add on to this, and you know Houston is the perfect example: 9-1-1 is public safety and public safety is, at the end of the day, Homeland

1433 Security.

1434 Mr. Olson. Yes.

Mr. Henry. And public safety can be trusted with this information, whether it you know be you know competitively sensitive or sensitive in the sense of national security.

You know when the threat to national security is a city being wiped out by a natural disaster, that is as much of a concern as anything else. Public safety has established standards and practices for dealing with sensitive information. We do it every day and don't have any sort of hesitation about being able to keep that visible to only eyes that need it.

Mr. Olson. I do have to thank your industry for what you did during Hurricane Harvey because I was there for Hurricane Ike and people didn't have information. They got on the roads when they should not have. Probably 50 people died and that is a big standard of deaths in terms of how well we are doing. And Brazoria County, right there on the Gulf of Mexico, had zero deaths during Hurricane Harvey. And the entire county was basically flooded from the Gulf halfway up to Pearland, Texas. So thank you for making that happen.

A big transition -- and this is for you, Ms. Atkerson. Back home, my church had -- I am involved with a small bible study group that gets together every Monday after the weekly service

to just talk about this service and lessons learned.

This past week was a very different meeting. We spent the entire hour, bumped it up to an hour and a half talking about a very tragic situation. One of our members, he works at a local store down there in Sugar Land, a co-worker lost his son to suicide this past week. She had lost a second son to suicide a few years ago and I cannot believe the pain she is going through.

And my question is this -- I support this bill that gets 9-8-8 going because we don't know if these boys could have had a number to call when they were in their crisis, can they reach out, could they, what happened? We will never know but how -- do you have any advice I can tell her from you what is going to happen with this system and how she can utilize it to make sure she is not -- this never happens again, that these kids, who are about they think the ultimate thing to do to take their lives, have a vehicle to vent and get some help to stop those suicidal thoughts?

Ms. Atkerson. Yes, absolutely. And I am very sorry to hear about the loss in your community. This is, obviously, a very difficult topic. Just one suicide death is estimate to affect at least six other people or more. And so we see a tremendous ripple effect and the numbers just continue to increase, as you all know, year after year in this country. It is a tragedy.

1479 One of the challenges has been that there hasn't been a 1480 comparable system to what we have for medical emergencies. 1481 don't have an easy -- most of us can't remember a time when we 1482 just didn't have 9-1-1 available to us, no matter where we are 1483 in this country to rapidly access medical care. 1484 Sadly, the same kind of three-digit rapid response has not 1485 been available for people in a mental health crisis. And as you 1486 are saying firsthand, people in a suicidal or mental health 1487 crisis, it can be just as life-threatening as a stroke or a heart 1488 attack. So transitioning the National Suicide Prevention 1489 Lifeline from a difficult to remember ten-digit hotline that still 1490 many, many people in this country don't have memorized or just 1491 imagine how difficult it is to try to think about what that number 1492 is if you are a mother with a child that is suicidal trying to 1493 remember a ten-digit number versus you know 9-1-1 or 9-8-8. 1494 So what I can say is, going forward, the urgency, this is 1495 a moral imperative for us to pass this legislation so that 9-8-8 1496 can be easily recognizable and accessible to all of our kids, 1497 family members, parents, to anyone in this country anytime. 1498 Thank you. 1499 Mr. Olson. Thank you. 1500 Mr. Doyle. The gentleman yields back.

Mr. Olson. Chairman, thank you for your indulgence.

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1502 yield back. The chair recognizes Ms. Clarke for 5 minutes. 1503 Mr. Latta. 1504 Ms. Clarke. Thank you very much, Mr. Chairman. I thank our ranking member for this very enlightening hearing today. 1505 1506 I want to thank our witnesses for bringing your expert testimony 1507 to bear. 1508 This is an extremely important hearing today. As a New Yorker, I can reflect on my experiences in the aftermath of both 1509 1510 the 9/11 terrorist attack and, years later, Superstorm Sandy to 1511 refresh my memory on how important network resiliency is to my constituents and to all Americans. 1512 1513 Today I want to first discuss the Americans who the Trump 1514 administration has too often treated with disdain and overlooked, 1515 the citizens in Puerto Rico. They have experienced a series of 1516 natural disasters that have become more frequent and more severe 1517 due to climate change. 1518 To echo Mr. Torres' statements in his written statement, 1519 quote, Puerto Ricans are U.S. citizens but, tragically, their 1520 voices have been largely absent from this crucial debate and the 1521 restoration and rebuilding processes have suffered as a result, 1522 end quote. 1523 The earthquakes that rocked Puerto Rico left the territory without power and led to 31.7 percent of cell sites down and left 1524

approximately 260,000 cable and wireline subscribers without service. My colleagues, Congressman Ruiz, Soto, and I read a letter to the FCC to raise concern about the fragility about the communication infrastructure on the Islands.

So my first question is actually to you, Mr. Torres. The FCC is supposed to measure whether broadband is being deployed in a timely fashion across the United States and it is supposed to know when and where the networks go out in times of disaster.

Can you discuss how the lack of real-time information on the network outages impacted people on the Islands and their loved ones in the rest of the United States trying to reach them?

Mr. Torres. Sure, I will give you two examples. One is the most recent example, the earthquakes. There was a person, a well-known activist tweeting can anyone -- on Twitter because she didn't have communications. She didn't have a mobile -- can anyone let me know if there is a tsunami coming? Because they didn't -- they weren't aware whether there was a tsunami warning because there was a lot of fear in Puerto Rico that a tsunami potentially was going to happen.

The second example I give is from the Public Safety Workshop that the FCC held a couple of years ago after Maria in the hurricane season 2017. And so this is a regional emergency communications coordinator of FEMA who said the voluntary -- testifying to the

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FCC at a hearing -- at a workshop -- the voluntary word needs to go, when it comes to like wires resiliency. We have a commercial entity selling themselves as public-safety grade. If you are going to make a profit saying you are a servant to the community with public safety grade communications, then you need to be able to prepare an answer in response as to where communications are available. The point was being made, at that workshop, that they are not getting information fast enough at the FCC. And because of issue of it is voluntary, it is proprietary, they are saying by the time we are getting information, especially in the case of Puerto Rico, it was already up. It was sending people to places to repair cell sites and all that and they were already repaired in some cases. didn't -- it was wasting time to be able to serve other places. So we have examples of people on the ground worried about tsunami warnings. We have a FEMA official concerned they are not getting real-time data fast enough. So we need -- so Puerto Ricans needed, and everywhere else needs data information much more quickly to first responders. Ms. Clarke. So can the FCC do more to gather and disseminate information about communication network reliability during and

immediately after such storms?

Mr. Torres. Say that one more time.

| 1571 | Ms. Clarke. Yes. I am saying can the FCC do more to gather?         |
|------|---|
| 1572 | Mr. Torres. Absolutely. First of all like we don't believe          |
| 1573 | there should be voluntary. It should be mandatory that they         |
| 1574 | participate. And also you know the Wireless Resiliency Framework    |
| 1575 | like is voluntary and we don't believe it should be voluntary.      |
| 1576 | We need it to be more rigorous oversight over these companies       |
| 1577 | because they have to be held folks have to be held accountable      |
| 1578 | for not responding.   |
| 1579 | It is a life and death issue. So like this gentleman said,          |
| 1580 | the FEMA official, that it can't be voluntary. There has to be      |
| 1581 | some sort of process of accountability.                             |
| 1582 | Ms. Clarke. Very well. Mr. Gerst, would you want to                 |
| 1583 | respond to that?  |
| 1584 | Mr. Gerst. Sure. First let me start by saying,                      |
| 1585 | Congressman, thank you for the question.                            |
| 1586 | Maria was a devastating event for everyone. Our companies           |
| 1587 | had to go to unprecedented lengths to restore services there.       |
| 1588 | In fact, one of our member companies had their generator actually   |
| 1589 | powering the airport, at one point, just to get supplies into       |
| 1590 | Puerto Rico. But we have invested in Puerto Rico and I think        |
| 1591 | the results show that we have moved from wood poles to steel poles. |
| 1592 | We have invested in backup power. And after the earthquake,         |
| 1593 | 68 percent of cell sites were up.                                   |

| 1594 | I know there is a close relationship between first responders      |
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| 1595 | in New York and Puerto Rico. And in fact, I have talked to a       |
| 1596 | few who say that, after the earthquake, nothing worked in Puerto   |
| 1597 | Rico except the wireless service. So it wasn't everywhere and      |
| 1598 | we need to do more but we have learned lessons and applied them    |
| 1599 | in Puerto Rico.  |
| 1600 | Mr. Chairman, I yield back.  |
| 1601 | Mr. Doyle. The gentlewoman's time has expired. Thank you.          |
| 1602 | Mr. Johnson, you are recognized for 5 minutes.                     |
| 1603 | Mr. Johnson. Thank you, Mr. Chairman.                              |
| 1604 | Mr. Bell, you know while ensuring network resiliency is            |
| 1605 | certainly an important overarching goal, I want to be sure that    |
| 1606 | the electric and communications industries aren't faced with       |
| 1607 | one-size-fits-all requirements that fail to consider the           |
| 1608 | realities on the ground.   |
| 1609 | Can you walk us through how your industry engages with State       |
| 1610 | Emergency Operation Centers during emergencies and how that        |
| 1611 | coordination could inform priorities for restoration efforts?      |
| 1612 | For example, how the fact that it is harvest time in one area      |
| 1613 | or geographical factors in a particular area where an outage might |
| 1614 | come into play factor into prioritization?                         |
| 1615 | Mr. Bell. Certainly. Thank you for the question.                   |
| 1616 | It is actually our primary contact at the Emergency                |

Operations Center is a member of my staff. And as soon as the center opens up, he goes over there and is there you know for the duration of the storm working on shifts, as we can. And there is where the communication takes place.

We get priorities from things that we may not be aware of and to go through them. In some cases, there was an example in Hurricane Michael where we actually got a call from the Florida Emergency Operations Center that an ILEC in Florida thought there was a hold on a pole in Georgia put on by the Georgia DOT. And so it was just a whole cascade of events that someone on the ground could not figure out how do I find out if I can go ahead and proceed with this. All the people who are right there in the Emergency Operations Center are able to determine no, everything is clear with that; you can keep going and get the people back to work in the field.

So it is -- in Hurricane Michael as well, one of the critical issues is not something you would normally think of. It was actually at peanut harvest time. And a lot of the damage that came through Georgia came through one of the largest areas where we grow peanuts. And so a lot of the focus was was to get the infrastructure back in place so those peanuts could be processed while still working on the rest of the storm and making sure all the other critical infrastructure is being done.

1640 Mr. Johnson. So it is a pretty real-time dynamic kind of thing.

Mr. Bell. It is absolutely real time.

Mr. Johnson. Okav.

Mr. Gerst, you referenced many of the mobile cell units in your testimony from COWs or Cells on Wheels to COLTs or Cells on Light Trucks. I am curious if there are regulatory obstacles that make it difficult to move those assets from region to region or State to State.

Mr. Gerst. Congressman, thank you for the question.

Yes, we have many tools at our disposal that we attempt to use to maintain service and these are things that we have used applying lessons learned from previous storms. And some of the things we have incorporated into our Cooperative Framework, including things like mutual aid, where we will actually repair each other's cell sites, and you know coordinating with local governments.

But yes, we have -- where we do have outages, we have the ability to bring in temporary cell sites and we actually call them a barnyard of solutions because there are cells on the back of trucks but we call them COWs, and COLTs, and GOATs. But we are starting to actually even use drones now, where you can add coverage where a cell site might have gone down and call it the

1663 Flying COW. 1664 Mr. Johnson. Are there Government regulations that make 1665 it difficult for you to do that kind of move from region to region 1666 and State to State, though? 1667 Mr. Bell. Thank you, Congressman. Yes, there are 1668 challenges but we are engaged with the State Emergency Operations 1669 Center and, typically, we can address those issues and get those 1670 resources in those areas. Certainly the SANDy Act helped by 1671 making sure that communications were prioritized as being part of that effort. 1672 1673 So yes, there are challenges but we are working with local 1674 governments on that. Mr. Johnson. Okay. Ensuring continuing -- ensuring 1675 1676 previously established procedures and coordination amongst wireless providers, backhaul providers, and power companies 1677 1678 before a disaster strikes is critical to effective restoration 1679 efforts when power and communication systems go down. The FCC's 1680 Disaster Response and Recovery Group is currently looking at these 1681 types of issues and hopes to submit best practices recommendations 1682 to the FCC soon. 1683 So Mr. Bell, can you talk a bit about this group, its work, 1684 and its importance? 1685 Mr. Bell. Well yes, and I will commend Commissioner Pai

| 1686 | for establishing the BDAC. It is a much better way for us to        |
|------|---|
| 1687 | resolve issues like this. The old way was they would put out        |
| 1688 | a request for comment; you would submit your comments and hope      |
| 1689 | that somebody actually read them and try and advocate on them.      |
| 1690 | Here  |
| 1691 | Mr. Johnson. Because my time is running out                         |
| 1692 | Mr. Bell. Okay.   |
| 1693 | Mr. Johnson can you add to your answer? Would it be                 |
| 1694 | prudent for Congress to review this group's recommendations for     |
| 1695 | best practices before contemplating legislative action?             |
| 1696 | Mr. Bell. Absolutely. Absolutely.                                   |
| 1697 | Mr. Johnson. Okay. All right, well thank you very much.             |
| 1698 | Mr. Chairman, I yield back.   |
| 1699 | Mr. Doyle. The gentleman yields back. The chair now                 |
| 1700 | recognizes Mr. Veasey for 5 minutes.                                |
| 1701 | Mr. Veasey. Thank you, Mr. Chairman.                                |
| 1702 | I wanted to ask Mr. Gossner a question. In Texas, we have           |
| 1703 | had some issues with wildfires in the past as well and I don't      |
| 1704 | know that that was something that has been in the news a lot around |
| 1705 | California, particularly your area. And I wanted to know what       |
| 1706 | you thought about the access to batteries.                          |
| 1707 | I know that, for instance, cell phone companies that may            |
| 1708 | have that are trying to replenish batteries that only can last      |

a few hours can have trouble getting to certain areas if they are in evac zones or if certain roads have been blocked off or cut off. What sort of lessons should we learn about being able to have access to those areas in the time of wildfires? Is there anything differently that can be done as far as being able to give them the access that they need so people can have their cell coverage restored in a more faster fashion?

Mr. Gossner. Yes, thank you.

I think you know part of it is they have to understand the environment they are going into. So I don't know who they are talking to. From our perspective, if we need to get power backup into a certain area and we can allow them, we will. Sometimes we send a crew with them to make sure it is safe. Sometimes their crew don't want -- doesn't want to go into it because they don't feel safe.

So there is multiple factors that drive why some towers get back up and some don't but those are all real discussions we have to have now and figure that out so, when we entertain these ideas in the future, we can work through the process quickly and figure out is this a critical tower or is it not a critical tower. If it is a critical tower, we have got to make every effort to get those up and running so we can provide the communication and then build out from there.

1732 But there is multiple reasons why crews can or cannot go in on both sides of the fence. So it is literally face-to-face 1733 1734 sitting down. How do we work through this? 1735 Mr. Veasey. Right. Right, exactly. 1736 One of the things that I read about the California incidents 1737 that interested me was, you know obviously, the use of internet. 1738 And I was reading that the internet landlines almost all, you 1739 know a lot of them mostly failed, but that the traditional-based 1740 copper landlines did not fail. Do you think that there needs 1741 to be some sort of a -- just to maybe sort of make people think 1742 about using more traditional products that live in these more 1743 rural areas that are hard to reach, where they may be more affected 1744 by wildfires? 1745 I know that we are very reliant, obviously, up on the newest 1746 technology but do you think, under these sorts of circumstances, 1747 that maybe, until a lot of these problems can be addressed, that 1748 we need to like maybe look back at more traditional landline 1749 products? 1750 Mr. Gossner. Yes, traditional landlines do last longer than 1751 the voiceover internet protocol-type lines. They are not 1752 failsafe but they do last longer. 1753 What I am being told today is that they are trying to transition out of copper altogether because the wireless 1754

technology, and the cable, the fiber optics is so much more powerful and better.

Mr. Veasey. Right.

Mr. Gossner. So they are trailing away from the copper.

Copper doesn't need power to maintain that connectivity, where everything else does.

So I will tell you in Sonoma County -- I am going to get these numbers a little bit wrong but Sonoma County 10 years ago, there was 350,000 people that had copper lines. Today, it is about 170,000 because everyone is making the transition to wireless. That is another reason why these towers need to be hardened. Everything needs to be to that standard, where we can rely on these components much more than we can now.

Mr. Veasey. This is fascinating.

What about as far as translation for people that live in these areas? Obviously, things need to be, especially in a State like Texas, or even California, obviously things would need to be translated into Spanish, for instance. Is there sufficient information out there as far as translation is concerned? Do you feel that that is being adequately addressed?

Mr. Gossner. It is being addressed. I don't know if I would say it is adequately being addressed. I will tell you, though, that WEA 2.0 and 3.0 addresses that. So the 360 characters also

| 1778 | adds a translation for Spanish, where the initial WEA product     |
|------|---|
| 1779 | did not, right, 90 characters and there was no Spanish            |
| 1780 | translation.  |
| 1781 | So they are working towards that but, again, it is a process      |
| 1782 | and it is a slow process.   |
| 1783 | Mr. Veasey. Yes. Well, thank you very much. I appreciate          |
| 1784 | your time.  |
| 1785 | Thank you, Mr. Chairman.  |
| 1786 | Mr. Doyle. The gentleman yields back.                             |
| 1787 | Mrs. Brooks, you are recognized for 5 minutes.                    |
| 1788 | Mrs. Brooks. Thank you, Mr. Chair. Thank you for holding          |
| 1789 | this important hearing.   |
| 1790 | When I first came to Congress, I was co-chair or I was            |
| 1791 | chair of the Subcommittee on Emergency Preparedness, Response,    |
| 1792 | and Communications. And I just want to thank all of you for your  |
| 1793 | work because I think we all know that in a time of disaster, this |
| 1794 | super computer we hold is often kind of our only lifeline and     |
| 1795 | it is so important that we figure out how to make sure that we    |
| 1796 | are as resilient as possible in times of disaster.                |
| 1797 | Mr. Gerst, I am co-chair of the 5G Caucus and so I want to        |
| 1798 | ask a little bit about 5G, as the country is transitioning to     |
| 1799 | the Next Generation of technology, what this transition means     |
| 1800 | for the resiliency of wireless networks. And clearly, there is    |

a different architecture. Companies are deploying these small cells, naturally densifying networks, having actually maybe a lot more. Can you tell me how this important conversion, what resiliency is going to be impacted by the rollout of the 5G across the country?

Mr. Gerst. Absolutely, Congresswoman. Thank you for your question and thank you for your leadership on 5G issues, making sure that the U.S. is the global leader and 5G is a priority for everyone I know, including you.

5G is going to bring incredible opportunities -- the high capacity/low latency capabilities, particularly for public safety. And public safety can use those capabilities actually in the field for innovations that Mr. Henry could probably talk to you about.

But you know from our perspective, we need hundreds of thousands of new cell sites to make that happen to get to that level of service for 5G. And the way that we build networks now is we do build them in redundant, diverse, and densified ways. So even if some cell sites go down, we do try to maintain coverage for emergency communications. By adding hundreds of thousands of new cell sites that 5G is going to bring, we absolutely believe it will help to improve resiliency.

And we think that the RESILIENT Networks Act is a

forward-looking bill. It talks about 5G, and how it might improve resiliency, and we appreciate that. Mrs. Brooks. Thank you. Anyone else want to comment on 5G resiliency or capabilities?

Okay, I will move on, then.

Mr. Henry, how does the practice of diverting 9-1-1 fees affect the ability to ensure 9-1-1 systems keep pace with technological changes and the ability to engage in effective long-term planning? Because we need to ensure that 9-1-1 services, obviously, provide the best emergency service as possible, so can you talk to us a bit more about -- you talked about the number of States that we know that do divert and yet -- and the practice that our States have to maintain to make sure that communities aren't diverting?

Mr. Henry. Sure and thank you for the question.

I guess top line, 9-1-1 fee diversion hurts not just the public but it also hurts public safety. It hurts in the sense that the folks making budget decisions about 9-1-1 are often not the people operating the PSAPs and they are not the people that are directing a State's 9-1-1 budget planning and policies.

One of the big effects that we have seen over the decade or so that FCC has been keeping records on these things, is that diversion often happens in sort of fits and spurts. And so the

| 1847 | 9-1-1 authority in the State, or you know the 9-1-1 governance     |
|------|--|
| 1848 | structure in a State may be surprised by a diversion of funds      |
| 1849 | from the top of the State level.                                   |
| 1850 | And so the aggregate effect of that is that you know you           |
| 1851 | have always got to prepare for you know a budgetary tornado to     |
| 1852 | come through and wipe out a good chunk of your funding for 9-1-1.  |
| 1853 | You get into a damage control mode, instead of a continuous        |
| 1854 | improvement and a continuous innovation mode, where you are        |
| 1855 | preparing for the next thing. You are constantly, instead,         |
| 1856 | preparing for the next disaster, whether that be a literal         |
| 1857 | disaster or a budgetary disaster.                                  |
| 1858 | Mrs. Brooks. What percentage would you say of the 9-1-1            |
| 1859 | capabilities now are text capabilities?                            |
| 1860 | I know our State has texting capabilities in 9-1-1. Is that        |
| 1861 | very common now in many of the other States?                       |
| 1862 | Mr. Henry. It is, I wouldn't say very common; probably 30          |
| 1863 | to 40 percent coverage. And of course, the difficulty with that    |
| 1864 | is that you don't find out that you can't text 9-1-1               |
| 1865 | Mrs. Brooks. Right.  |
| 1866 | Mr. Henry until you find out you can't text 9-1-1.                 |
| 1867 | Mrs. Brooks. Okay, thank you.                                      |
| 1868 | Mr. Chairman, I just want to mention, in response to our           |
| 1869 | colleague Ms. Clarke's question about the FCC doing more to garner |

1870 or to gather and information and disseminate data during disasters. The FCC is planning on acting tomorrow on a second 1871 1872 further notice of proposed rulemaking to do just that, I have 1873 been informed by staff. I just thought I would share that we should look for further proposed rulemaking tomorrow. 1874 1875 With that, I yield back. 1876 Mr. Doyle. The gentlelady yields back. 1877 The chair now recognizes Ms. Eshoo for 5 minutes. 1878 Ms. Eshoo. Thank you, Mr. Chairman. And thank you to all of the witnesses for your testimony. 1879 1880 If I were to summarize all the various things that have been 1881 said, there are two things that stand out: what kind of system 1882 we have and how much more we need to do to optimize the system 1883 that we have. And when there are cracks in the system, people's 1884 lives are at stake. 1885 I want to read two of many messages I received from 1886 constituents during the PG&E shutoffs last October, which 1887 resulted, of course, in the loss of cellular communications. A family from a rural area of my district -- yes, Silicon Valley 1888 1889 does have some very beautiful rural areas -- quote, when PG&E 1890 cuts the power off, those of us who live in rural areas are not 1891 only left without electricity, we are left without

communications. Cell phones don't work. Landlines don't work.

1892

Generators don't keep the Wi-Fi on. Why are we being left out to dry? We have no way to call 9-1-1 in an emergency and no way to get alerts if there is danger and we need to evacuate.

Another constituent wrote: During the second more recent outage, we had broadband and phone for only 15 hours. It then failed, leaving us with no means of communication. That is a -- that is a scary term: no means of communication in the United States of America.

This is a serious safety concern. This is not just an annoyance. If there were to be a fire in our highly vulnerable tinder-dry area, we wouldn't be able to report it, wasting precious time while it spreads. The same is true if there were any sort of medical emergency.

So these people are understandably: A) they are vulnerable;
B) they are afraid. And they are justifiably upset and so am
I. So, we have to help them.

Chief Gossner, I want to salute you, as others have, for your absolutely superb leadership. You, your department, and the people of Sonoma County and Santa Rosa have been through actual hell -- lives lost, devastation, homes lost, hope lost.

And when I went up to visit and to hear from the entire team, it will always remain with me, grown men weeping and these were first responders who were going door-to-door to try and save

| 1916 | people's lives because they had no communication system             |
|------|---|
| 1917 | whatsoever.   |
| 1918 | Now, we have a problem in it is an ambiguity, actually,             |
| 1919 | in Federal law relative to what States can and cannot do. And       |
| 1920 | I thank you for your support of the WIRED Act. It is very           |
| 1921 | important.  |
| 1922 | Mr. Gerst, I know that CTIA hasn't doesn't have any                 |
| 1923 | position on this but I ask you to really take a hard look at the    |
| 1924 | legislation. And the reason I am asking you to is rather obvious.   |
| 1925 | You used the word resiliency I tried counting and then I lost       |
| 1926 | count but that is an operational word. And if States cannot have    |
| 1927 | a say in setting resiliency, sometimes it happens, a lot of times   |
| 1928 | it doesn't and we have to clear the weeds out of this. States       |
| 1929 | should have a hand in that and really, that is what the legislation |
| 1930 | does. So, I appreciate the work that CTIA is doing.                 |
| 1931 | Mr. Torres, you gave beautiful and profoundly sad testimony.        |
| 1932 | What I would like to ask you is if there is one thing that you      |
| 1933 | want us to do, what is it?  |
| 1934 | Mr. Torres. It is for this committee to use its oversight           |
| 1935 | powers.   |
| 1936 | Ms. Eshoo. But for what? What item is the top thing for             |
| 1937 | you being at the bench today?                                       |
| 1938 | Mr. Torres. I was advocating a couple things. One,                  |

| 1939 | advocate Puerto Ricans. Just, we want to know why. So just if      |
|------|--|
| 1940 | we know what happened  |
| 1941 | Ms. Eshoo. Well, I think that there should be a letter             |
| 1942 | circulated to all members of this subcommittee, signed by everyone |
| 1943 | on a bipartisan basis, to make sure that what is needed there,     |
| 1944 | and the assessment that is not public be made public.              |
| 1945 | Mr. Torres. Well I think, as I mentioned before, the fact          |
| 1946 | that it has been mentioned already, I believe it is 60 percent     |
| 1947 | of households are wireless only and it is only going up, right?    |
| 1948 | But yet, according to GAO, the length of outages from 2009 to      |
| 1949 | 2016 has doubled when it comes to wireless, right? And so the      |
| 1950 | fact that this is a growing problem.                               |
| 1951 | And so it is a fact that there is DIRS, right, to make sure        |
| 1952 | it is mandatory, but also the Wireless Resiliency Framework.       |
| 1953 | It is just we don't believe it should be voluntary. And so there   |
| 1954 | has to be oversight to make sure that first responders first       |
| 1955 | of all, that the networks are resilient but then first responders  |
| 1956 | are actually and other folks are able to respond to disasters.     |
| 1957 | So it should not be voluntary.                                     |
| 1958 | Ms. Eshoo. Thank you very much.                                    |
| 1959 | Mr. Doyle. The gentlelady's time has expired.                      |
| 1960 | Ms. Eshoo. Thank you, Mr. Chairman.                                |
| 1961 | Mr. Doyle. Thank you.  |

1962 Mr. Walden, welcome back. You are recognized for 5 minutes. 1963 Mr. Walden. Thank you. I was downstairs at the other 1964 hearing. 1965 So, I appreciate all your testimony and the comments. 1966 know you have covered most of the ground. 1967 I think back in my own experience and, again, in small market radio, and covering fires, and seeing some of these disasters. 1968 And you know I have had -- I had five transmitters. I had three 1969 1970 antenna sites. I had some that were under threat of fire that 1971 were up on top of a ridge top. And I am trying to be balanced 1972 here in saying how do you -- how do we mandate a resilient network in the face of a conflagration-like tragedy? You had to deal 1973 1974 with it in Santa Rosa. I drove through there and I mean it is 1975 just it is unbelievable in Paradise and those areas, as we see 1976 the video. 1977 And so I want to be thoughtful about this. I know as a 1978 broadcaster we had all these interconnections. We had radio 1979 connections to our law enforcement. We could talk. We could 1980 listen to each other. That was one of our EAS stations. We had 1981 backup on that. But sometimes when these disasters happen, there 1982 is no -- I mean you are just done, right? I mean you rely on 1983 ham radio operators. You create your own networks. 1984 But I am just curious with some of the voluntary work a couple

| 1985 | of you talked about. Can you speak to that a little bit more,    |
|------|--|
| 1986 | the things you have just announced in the last I guess today     |
| 1987 | maybe even, Mr. Gerst, Mr. Bell?                                 |
| 1988 | Mr. Gerst. Thank you, Congressman and Ranking Member.            |
| 1989 | Thank you for the question. And I appreciate your experience     |
| 1990 | vast experience on these issues.                                 |
| 1991 | You know with the increasing severity and intensity of these     |
| 1992 | storm events, we are constantly having to reevaluate             |
| 1993 | Mr. Walden. Right.   |
| 1994 | Mr. Gerst how we make our networks resilient.                    |
| 1995 | Mr. Walden. Right.   |
| 1996 | Mr. Gerst. We have, since Superstorm Sandy, through the          |
| 1997 | Cooperative Framework, taken significant steps working amongst   |
| 1998 | competitive wireless providers, enabling them to support each    |
| 1999 | other's customers  |
| 2000 | Mr. Walden. Right. Makes sense.                                  |
| 2001 | Mr. Gerst enhancing collaboration with utilities.                |
| 2002 | Mr. Walden. Right.   |
| 2003 | Mr. Gerst. So yes, we are doing all these things on a            |
| 2004 | voluntary basis but, even with all those things, we do think new |
| 2005 | tools could be helpful here. So I would like to explore that.    |
| 2006 | Mr. Walden. Like what?   |
| 2007 | Mr. Gerst. Well we think you know, certainly, having the         |

FCC set expectations at a national level, both for wireless and having the -- and including the power industry would be helpful because one of the things we have learned with the Framework with all these voluntary commitments is that a lot of the folks at the local level, and you may have experienced this, bring their own expectations to what you are supposed to be doing in an emergency.

And by having a national framework around what we are supposed to be doing, could help make sure that everybody knows what wireless providers are supposed to do, what electric providers are supposed to do and that could help to enhance the resiliency --

Mr. Walden. Yes.

Mr. Gerst. -- while still giving us the flexibility to work at the local level.

Mr. Walden. All right, Mr. Bell.

Mr. Bell. Currently in FEMA you know there are the emergency support functions, each one. And if you were to look up or Google you know best practices in disaster recovery, you would find volumes of information of best practices that are out there.

I think what we need to improve on is the communication industry has their volumes and the electric industry has their volumes. And as the two industries get more and more intertwined,

2031 there has to be a whole lot more communication between the two. 2032 And I think that is what this will provide the opportunity to 2033 do is to start making sure that we are --2034 Mr. Walden. You are talking to each other and have a common 2035 plan. 2036 Mr. Bell. Absolutely. We are not working in silos. 2037 Mr. Walden. Yes, that is important. 2038 I know I have heard over the years there were some people 2039 that thought you ought to have a generator and a propane tank 2040 at every cell site. Is that practical? 2041 Mr. Bell. It is not practical but I will tell you that --2042 Mr. Walden. Should we mandate it? 2043 Mr. Bell. We are one of the few utilities in the country 2044 that actually has our own telecom provider. And it is for that 2045 very reason we want to be able to know that they will be there 2046 when we have a problem. And they proved their worth in Hurricane 2047 Katrina and Hurricane Michael. We were able to use them 2048 throughout the storm and they do have backup generators. 2049 Mr. Walden. At every site? 2050 Mr. Bell. It is expensive -- yes. 2051 Mr. Walden. Mr. Gerst? 2052 Mr. Gerst. Sure, Congressman. You know backup power is 2053 a great tool in the toolbox for resiliency.

| 2054 | Mr. Walden. Right.  |
|------|---|
| 2055 | Mr. Gerst. But we have hundreds of thousands of cell sites          |
| 2056 | so we have to look at it on an individual case-by-case basis.       |
| 2057 | We have got huge boomer towers out there, just like yours           |
| 2058 | Mr. Walden. Yes.  |
| 2059 | Mr. Gerst and we have got towers and antennas on the                |
| 2060 | sides of buildings. And we are going to need hundreds of            |
| 2061 | thousands of more sites for 5G that is going to be coming. In       |
| 2062 | each one of those cell sites, we have to consider what the backup   |
| 2063 | power solution is going to be because we are so dependent on power. |
| 2064 | And that includes you know these are batteries that are the         |
| 2065 | size of cabinets, you know generators the size of trucks, right,    |
| 2066 | and we have to consider space, noise, local regulations, and air    |
| 2067 | quality requirements, even in the type of fuel that we are using    |
| 2068 |   |
| 2069 | Mr. Walden. Right.  |
| 2070 | Mr. Gerst because we sure don't want to have the type               |
| 2071 | of fuel that would be caught up in a fire.                          |
| 2072 | Mr. Walden. Right, explosive. Right.                                |
| 2073 | Mr. Gerst. So it is a big challenge but a reasonable and            |
| 2074 | flexible approach we think would be helpful here.                   |
| 2075 | Mr. Walden. All right. Thank you very much.                         |
| 2076 | Thank you, Mr. Chairman.  |

Mr. Doyle. Sure. The chair recognizes Ms. Matsui for 5 minutes. Ms. Matsui. Thank you very much, Mr. Chairman. I want to thank the witnesses for being here today for this very important hearing. The Federal Communications Commission, the FCC, has an obligation to assist State and local governments to prepare for, respond to, and learn from disasters. However, the Agency's 

My Emergency Reporting Act would require the FCC to standardized its emergency response by conducting field hearings, issuing reports, and making policy recommendations whenever disasters strike. Our current approach of relying on Members of Congress to call on the FCC to act is no longer sustainable. We need to set a baseline level of responsiveness to ensure local officials have the support they need to secure our communication networks in the face of rapidly changing climate.

response to significant emergencies has been inconsistent. As

the number and severity of natural disasters increases, it is

critical that the FCC responds adequately and swiftly.

Mr. Torres, can you describe the shortcomings of the FCC's existing emergency reporting structure and how standardizing the Agency's emergency response approach might improve network resiliency?

| 2100 | Mr. Torres. Yes, as I mentioned already before, that there      |
|------|---|
| 2101 | isn't one example, again, Puerto Rico, it wasn't coming fast    |
| 2102 | enough. The information that the first responders needed didn't |
| 2103 | come fast enough.   |
| 2104 | And it is critically important because, as I failed to          |
| 2105 | mention when the Congresswoman Eshoo was here, that currently   |
| 2106 | the FCC, there is no they have no measurements. The wireless    |
| 2107 | resiliency network doesn't have any way to measure the metric   |
| 2108 | of whether the Framework is going to work.                      |
| 2109 | Ms. Matsui. Absolutely.   |
| 2110 | Well, when conducting field hearings, my bill requires the      |
| 2111 | FCC to not only consider consulting public safety experts,      |
| 2112 | academics, and industry representatives but, also, individuals  |
| 2113 | affected by the emergency.                                      |
| 2114 | Why is this perspective necessary to truly understand the       |
| 2115 | full impact of the disaster?                                    |
| 2116 | Mr. Torres. It is important to hear from people on the          |
| 2117 | ground because you get a perspective on what the needs are of   |
| 2118 | everyday people, particularly as we more folks are wireless     |
| 2119 | only. There is a sense of urgency that is needed in order to    |
| 2120 | respond to disasters that are happening all the time.           |
| 2121 | Ms. Matsui. Right.  |
| 2122 | Mr. Torres. And more importantly, it is going to inform         |

2123 -- it is going to help to inform policy going forward. It is 2124 critical. It is critical that we have them. 2125 Ms. Matsui. Sure. Okay, my Emergency Reporting Act would 2126 also require the FCC to initiative a rulemaking to develop improved standards requiring communication network operators to 2127 2128 notify 9-1-1 centers when they are experiencing outages that 2129 prevent consumers from completing 9-1-1 calls or when emergency 2130 calls do not include vital information like location or number 2131 data. 2132 Mr. Henry, have you heard of instances in which consumers' 9-1-1 calls do not include location or number data and what 2133 2134 challenges do 9-1-1 centers have -- face in dispatching help in 2135 these cases? 2136 Mr. Henry. Sure and thank you for the question. 2137 Outages or outages in either any, or a location, or a phone 2138 number delivered to a PSAP are common enough that you can speak 2139 to almost any telecommunicator and they will tell you about an 2140 experience --2141 Ms. Matsui. Okay. 2142 -- with that, where there is no call-back number Mr. Henry. 2143 or there is no location. 2144 If there is no location, then the call taker must hope that 2145 the person calling 9-1-1 is able to communicate verbally their

location, which means that they both have to know their location

2146

|      | ,                           |
|------|---|
| 2147 | and they have to be able to speak.                                |
| 2148 | Ms. Matsui. Okay. And Chief Gossner, I imagine the Santa          |
| 2149 | Rosa Fire Department experience situations in which limited       |
| 2150 | information of a resident's 9-1-1 call has prevented effective    |
| 2151 | response. Is that correct?  |
| 2152 | Mr. Gossner. That is correct.                                     |
| 2153 | Ms. Matsui. Okay. While the FCC has notification                  |
| 2154 | obligations for network outages, the threshold remains high and   |
| 2155 | 9-1-1 centers are often left in the dark about service outages    |
| 2156 | in their territory, jeopardizing public safety.                   |
| 2157 | Mr. Henry, do you believe a more effective network outage         |
| 2158 | notification threshold would help improve the flow of information |
| 2159 | to 9-1-1 centers?   |
| 2160 | Mr. Henry. Absolutely, 9-1-1 and all of public safety would       |
| 2161 | benefit greatly from network outage reports that are better       |
| 2162 | tailored to their needs.  |
| 2163 | Ms. Matsui. Okay. I recently sent a letter to Chairman            |
| 2164 | Pai, urging him to include wildfire-specific recommendations in   |
| 2165 | the Wireless Resiliency Framework. While the FCC has solicited    |
| 2166 | comments on improving the Framework in the context of hurricanes, |
| 2167 | Chairman Pai would not commit at our oversight hearing to doing   |
| 2168 | the same for wildfires.   |

| 2169 | I am glad to see the RESILIENT Networks Act, introduced by          |
|------|---|
| 2170 | Chairman Pallone and Representative McNerney, takes steps to        |
| 2171 | mandate elements of the Framework. In addition, I believe there     |
| 2172 | is an opportunity to require the FCC to finish long overdue efforts |
| 2173 | to modernize the Framework, including recommendations specific      |
| 2174 | to wildfires and other disasters.                                   |
| 2175 | Mr. Torres and Chief Gossner, do you believe that                   |
| 2176 | wildfire-specific recommendations would help local responders       |
| 2177 | better prepare for communications outages associated with           |
| 2178 | wildfires? A yes or no, please.                                     |
| 2179 | Mr. Torres. Yes.  |
| 2180 | Mr. Gossner. Yes.   |
| 2181 | Ms. Matsui. Okay, fine.   |
| 2182 | Thank you and I yield back my time.                                 |
| 2183 | Mr. Doyle. The gentlelady yields back.                              |
| 2184 | The chair now recognizes Mr. Walberg for 5 minutes.                 |
| 2185 | Mr. Walberg. Thank you, Mr. Chairman, and thanks to the             |
| 2186 | panel for being here.   |
| 2187 | Representing Michigan's Energy District, I appreciate the           |
| 2188 | fact and am proud, at times, when I have seen consumers' energy     |
| 2189 | trucks, and crews, and DTE heading south and east during disaster   |
| 2190 | situations to provide mutual aid and knowing the fact that, as      |

that develops, if there ever is an emergency, a national disaster

2191

in Michigan, which we think of as a place that is heaven all year round, great weather wherever you find it, that the industry is growing in their understanding of working together to improve coordination.

Mr. Bell, can you describe for us today some of the multi-stakeholder groups that electric utilities and communications providers participate in to develop best practices to reduce or eliminate outages?

Mr. Bell. Well, obviously, there is the BDAC. We have addressed that already. They are specifically addressing that very issue and there are multiple stakeholders in there.

In Georgia, there is a group called the Georgia Utility
Coordinating Council. It is made up of all utilities and their
main focus is how utilities can best work on the right-of-way,
whether it be constructability or damage prevention. And then
of course, there is Georgia 8-1-1, that is made up of multiple
utilities, including both electric and communication that is
specifically focused on damage prevention, whether it be in normal
construction or you know what is referred to as extraordinary
circumstances, when a hurricane occurs.

So and Georgia has those, as well as most States around the country have some sort of collaboration, where the focus is how can the utilities work together you know to have both a safe and

2215 reliable infrastructure.

Mr. Walberg. And this information is passed on aggressively to other parts of the country as well?

Mr. Bell. Yes, there is a lot of sharing, best practice sharing through different organizations. You know the Common Ground Alliance will have a conference in a couple weeks out in California and most of the -- just all the States, including Canada and Australia will be represented out there. The very purpose is to share best practices on that type of information.

Mr. Walberg. Mr. Gerst, do you have anything to add to that?
Mr. Gerst. Thank you for the question, Congressman.

Yes, Mr. Bell is right that there are places where there is best practices being developed and shared, and we rely on them extensively, and but we -- given the experiences we have had, particularly in Hurricane Michael in that race to restore service, where we were tripping over each other trying to get power and wireless services up, or even in the recent events in California, we recognized that we need to do something a little bit different now. And that is why we have announced this effort with the Edison Electric Institute, where we are going to, for the first time, bring leaders in our member companies together. That is not something that has happened before in that way, the way that we are talking about, and we are going to try to identify some

near-term actions. That may yield best practices but at least establishing those lines of communication are going to be helpful.

But ultimately, we may need even further more tools. We don't yet know exactly how those will work out but we do expect that you know making sure that we have lines of communication that folks in the state and local level know what resources are available and it is consistent in terms of resiliency is going to be very helpful.

Mr. Walberg. Okay.

Mr. Gerst, I understand the FCC's rules currently prescribed -- prescribe an aging process for numbers that would provide a grace period for customers affected by wildfires or other disasters.

Rather than drastically reinvent the system under the PHONE Act, are there ways that the FCC could modify its existing rules that would make sure that residential subscribers who have been displaced by natural disaster would not lose their landline telephone number that was assigned to them?

Mr. Gerst. Congressman, thank you for the question because, in an emergency, we know that people reach for wireless device and that is the first thing, one of the first things they grab when they leave their house to evacuate. And the benefits of mobile wireless is that they can take both their service and their

telephone number with them. So this isn't really an issue affecting the wireless industry or wireless consumers.

The FCC has very robust policies in place to make sure we don't exhaust the pool of telephone numbers that we have and how we allocate them. And it also enables competition by making sure that folks aren't hoarding numbers in a way. So this is something that we would be happy to work on and work with your office on.

Mr. Walberg. Thank you. I yield back.

Mr. Doyle. The gentleman yields back.

The chair now recognizes Mr. Soto for 5 minutes.

Mr. Soto. Thank you, Mr. Chairman.

When Hurricane Michael hit Florida, that very next day I had contacted one of my colleagues, Congressman Dunn, who represents the Big Bend area, via text to assure him that our staff would help him with any casework that would come up because his office was inundated. He received that text about 3 months later, unfortunately. And we were able to get a hold of him because of a satellite phone a few days later. But it shows that cell phone service can interrupt just basic interactions between offices as we are dealing with these issues.

In Puerto Rico, it was even worse after Hurricane Maria and Hurricane Irma. We had mayors given sat phones that didn't work. They were required to fill out applications on the internet for

FEMA relief and had no internet. And it went on for months and months. It was just dumbfounding that that could still happen nowadays but it really alerted me to the fact that we have a resiliency issue that we need to work together on to fix.

I wanted to start with Mr. Gerst and Mr. Torres. Issues like are addressed in the WIRED Act and the READI Act, will those help us avoid situations of breakdowns like we saw in Puerto Rico and Florida with regard to cell phone service or communications?

And I will start with you, Mr. Gerst, and then go to Mr.

Torres.

Mr. Gerst. Congressman, thank you for the question.

The events of Hurricane Maria were devastating for everyone. As I noted before, our member companies had to go to considerable lengths just to restore services. It took months to get back to some level of normalcy. It took some of our member companies working directly with the local governments to try to get resources in. In fact, at one point, one of our member company's generator was powering the airport to actually just get supplies into the Island.

We do think that our member companies have invested in Puerto Rico to make it stronger and that was evidenced last month, when the earthquake hit, knocking out power across the Island, 68 percent of the cell sites stood up. And the reason they were

2307 up is because we are invested in steel poles and we are invested 2308 in diverse backup power solutions. 2309 So we do think that there is more that we can do to try to 2310 work together to invest in both Puerto Rico and to address some 2311 of the challenges we saw in Hurricane Michael, where we were all 2312 racing to try to restore service between utilities and wireless, 2313 and we need to enhance our coordination capability. 2314 One of the things that we appreciate about the RESILIENT 2315 Networks Act is that it does focus on collaboration as one of 2316 its primary goals to try to bring its stakeholders together at 2317 the national level. And so we do think that that could be very 2318 helpful. 2319 Mr. Soto. And we do understand it is not your burden to 2320 bear alone, which is why we have these bills together to try to 2321 help out. 2322 Mr. Torres, it would be great to hear from you about how 2323 critical the WIRED Act, the READI Act, and other legislation 2324 before us is to help --2325 Mr. Torres. We support both Acts. We believe they will 2326 help. We also support the RESILIENCE Act. But for us, there has to be more. More needs to be done. 2327 2328 As I mentioned before, the Wireless Framework is only a 2329 couple of years old, right, and it is voluntary. We already have

folks from FEMA saying, testifying that it is too slow. And so what we need, as I mentioned in my testimony with Puerto Rico, we need to know what happened. I am hearing the CTIA saying the improvements they have made. We don't know what -- if the improvements were made. We don't know. We have to take it from the word of industry. We don't have any official Government report. So we need reporting to know what happened and make sure that, as Commissioner Rosenworcel said: Is the money being spent to address the actual situations?

Mr. Soto. And I think the reporting is very important and I think you will get a lot of common ground.

I wanted to turn to Mr. Bell, our neighbors to the north in Georgia, which you rarely probably hear. What gaps did you see when Hurricane Michael both hit our State and your State and what can we do to help?

Mr. Bell. I think it is the first time we realized or the first major storm we had, where communication and the electric industry had -- were as intertwined as they are.

There was a lot of confusion in the beginning about fiber cuts and that is because, on a normal storm, a Category 1 storm, it is electric tree crews that are out there clearing the trees and the debris. But when you have a storm the magnitude of Michael, it is not us. It is local government and the DOT that

| 2353 | is clearing the roads.   |
|------|--|
| 2354 | And so the assumption was the electric utilities were cutting      |
| 2355 | fiber and that wasn't the case but no one was talking to the DOT   |
| 2356 | and the local governments any critical fiber. There was a          |
| 2357 | communication between the electric and the communications.         |
| 2358 | So it is something I think we all learned from that and will       |
| 2359 | use moving forward, for sure.                                      |
| 2360 | Mr. Soto. Okay, thank you. My time has expired.                    |
| 2361 | Mr. Doyle. The gentleman's time has expired.                       |
| 2362 | Mr. Bilirakis, you are recognized for 5 minutes.                   |
| 2363 | Mr. Bilirakis. Thank you, Mr. Chairman. I appreciate it.           |
| 2364 | Mr. Gerst, there is an increasing prevalent problem with           |
| 2365 | the use of contraband cell phones in prisons with intent to commit |
| 2366 | crimes behind bars. I worked on this issue in the Florida          |
| 2367 | legislature as well. Even though they are prisoners, there are     |
| 2368 | many cases where public safety is truly at risk, such as crimes    |
| 2369 | aiding in physical and sexual violence against the public.         |
| 2370 | Can you discuss what steps the wireless industry has taken         |
| 2371 | to help address this problem and what challenges exist to crack    |
| 2372 | down on this contraband?   |
| 2373 | Mr. Gerst. Congressman, thank you for your question and            |
| 2374 | thank you for your leadership and attention to this very important |
| 2375 | issue.   |

You know we don't want our wireless devices to be misused, in the way that you are being described, and so we have fully embraced working directly with State Departments of Corrections, working with the Bureau of Prisons, working with the FCC to find solutions to this growing problem.

There is no one way to solve this issue. It takes a mix of technology and processes to address the issue. We have actually worked and tested various solutions that could help the State officials identify where these devices are used and then help us to stop them but we probably need some more teeth to really make it a deterrent for the use of these contraband devices.

And so we do think that, for example, putting the FCC as the cop on the beat to do something there could be helpful but we certainly appreciate your leadership and attention to this issue.

Mr. Bilirakis. And again, I am willing to sit down again with you, and all of you, to find a solution to this problem because we are going to file some legislation. So any input you have, please don't hesitate.

And then you know, again, I would like your support on these issues but, of course, you have to look at the final draft before you make a decision.

In closing, I want to highlight the importance of the

McNerney-Bilirakis READI Act to the people of my district, on the coast into Florida. Actually, I am in the Tampa Bay area, the coastal area of Tampa Bay. This bill can save lives by ensuring FEMA emergency messages get to at-risk people during a hurricane or flood. And I thank the chairman for the READI Act inclusion at this legislative hearing.

And if anyone would like to comment on that particular piece of legislation, I would be happy to listen. Mr. Gerst.

Again, Congressman, thank you very much for your leadership and your support of that bill.

From our perspective, wireless emergency alerts have quickly become one of the most effective alerting tools in the country, and we need to ensure that consumers continue to trust the information that they are getting from the wireless emergency alerts, and make sure that alert originators, who send the alerts to warn us to get us to evacuate from these areas, have the tools and the training that they need to be able to use it most effectively.

The READI Act can help do that by encouraging alert originators to develop best practices, to avoid false alerts, to harness the new capabilities we just rolled out in wireless emergency alerts. As Chief Gossner mentioned, there is all new capabilities that just came online last year, thanks to hard work

2422 from the FCC, from the wireless industry, and from FEMA. 2423 so we are looking forward to continuing to improve and keep 2424 wireless emergency alerts a trusted source. 2425 Mr. Bilirakis. I appreciate it very much. And anyone else? I don't have much time. Anyone else? 2426 2427 Well, thank you very much and I yield back, Mr. Chairman. 2428 Mr. Doyle. The gentleman yields back. 2429 The chair recognizes Mr. Cardenas for 5 minutes. 2430 Mr. Cardenas. Thank you very much, Mr. Chairman. 2431 appreciate this opportunity for us to have this public hearing 2432 so that the public can understand a little bit more as to why 2433 all of these issues are so important to individuals and family 2434 members across our country. 2435 First, I want to thank you, Mr. Gossner, and all of you for 2436 your expertise, but Mr. Gossner and thousands of firefighters 2437 and first responders in California and across the country who 2438 are on the front lines every day, risking their lives to protect 2439 everybody from devastating fires and other disasters. 2440 I am glad we have an opportunity today to discuss the 2441 importance of technology in wireless communications in 2442 emergencies and natural disasters, and also to explore ways to

strengthen America's telecommunications infrastructure to ensure

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public safety.

Last year, during its 7,860 wildfires, California experienced significant cell phone service interruptions during these disasters. In one county, over half of the 280 cell phone tower sites lost service, as well as some landlines experienced connectivity failures. These fires threaten not only American lives but homes, businesses, and wildlife. As climate change worsens, these wildfires will only continue to grow in intensity, frequency, and ferocity, as they have in recent years. We need to bolster our telecommunications infrastructure to ensure their resiliency during emergencies.

I welcome today's thoughtful discussion and my first question is to you, Mr. Gossner. For many of us, it is obvious why we want to be able to communicate during a natural disaster but I worry that some don't necessarily understand the importance of doing all we can to keep our networks up and running.

Can you explain a little more about why it is so vital for public safety officials to be able to communicate with the public during a natural disaster?

Mr. Gossner. Sure. Thank you for the question.

It is imperative that we build a system that is resilient enough that can withstand a certain amount of damage so, when that emergency is starting to unfold, we are able to communicate with the public and give them the information that they need to

either evacuate, or shelter in place, or whatever it may be.

There are times when it is community members talking to community members through different social media platforms.

Those go down as well.

It really gives us the ability to notify folks that there is impending danger. And that is really what this is. We will never be able to build a system that stays 100 percent all the time. I don't think that is what we are asking. But we need to build some resiliency, some capacity that those towers will last for enough time to notify the folks that we need to notify to get out of harm's way. And that is really what we are looking for is to build in that resiliency so we can make those notifications.

Mr. Cardenas. And there are various ways to do that, correct, I am sure. To the general public, redundancy sounds redundant. It sounds like who would want to be involved in redundancy, that is the dumbest thing I have ever heard. But when it comes to issues like this, isn't redundancy something that is critical to making sure that, when something bad happens, there are alternative routes or alternative opportunities to make sure that people can still communicate?

Mr. Gossner. Yes, so for me, it is not only redundancy but it is hardening the entire network. You have got bare cables

doing up into a framework of a tower. Insulate those in the Wildland Urban Interface so that they can withstand some heat.

Simple things -- I think are simple. Maybe they are not so simple but they seem reasonable. And like I say, we are not going to build something that is going to last forever but we need to be able to provide assurance to the community that we can get them the alerts that they need to get out of harm's way.

Mr. Cardenas. Can you briefly discuss what it was like for residents in Santa Rosa who were without phone or internet service during the wildfires that devastated their community?

Mr. Gossner. Yes, it was complete pandemonium. You know it ranged from all of the emotions you can expect. And not only could we not communicate, that meant we had to go in there and knock on doors, and use sirens, and get everyone out, and then you had to get everyone out while the fire was chasing you through the community.

So when you lose connectivity during -- this is a no-notice event, which is different than a hurricane. We all kind of know when a hurricane is coming, for the most part, so you can prepare a little bit differently. But this is one of those no-notice events that is very impactful to the community and public safety when it is happening in your neighborhood. And it is happening up and down the State, as we have witnessed since -- for a long

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time, right?

So I go back to the Valley Fire in 2015 in Lake County and, 2515 2516 from that, you can name -- tick off the fires in the State of 2517 California, both northern and southern. 2518 Mr. Cardenas. The responsible thing for us to do as 2519 Congress, in my opinion, is to make sure that the RESILIENT 2520 Networks Act actually gets through the process and signed into 2521 law so that locals can actually reap the benefits of this important 2522 legislation. 2523 I yield back. Thank you. Mr. Doyle. The gentleman yields back. 2524 2525 The chair now recognizes Mr. Gianforte for 5 minutes. 2526 Mr. Gianforte. Thank you Chairman Doyle. I especially 2527 want to thank you for including H.R. 4194, the National Suicide Hotline Designation Act of 2019 in today's hearing. This is a 2528 2529 critical piece of legislation that can help Americans facing a 2530 crisis. 2531 Our Nation truly faces an epidemic of suicide and Montanans, 2532 tragically, are all too familiar with it. Montana has the highest 2533 suicide rate in the nation. Unfortunately, mental health care is not available to many Montanans. In fact, more than 600,000 2534 2535 Montanans live in an area where there is a shortage of mental 2536 health professionals.

Last year, I held two mental health and substance abuse roundtables in Montana. Providers and experts described the need for more resources to address mental health care and prevent suicide. We need a multipronged approach to combat this tragic situation.

Ideally, everyone would have access to preventive mental health care. Folks who live in rural and frontier communities face overwhelming obstacles to receive mental health care. That is why the 9-8-8 is so important.

The goal of the National Suicide Hotline is to ensure people know about and have access to the services they need in the face of a crisis. Our bill provides this essential service for anyone facing a mental health crisis and helps our communities grow healthier and stronger.

In addition to this bill, I have also introduced a bill with Representative Beyer to conduct a national suicide prevention campaign. We need to ensure that those struggling with depression, anxiety disorders, and other mental illness don't feel stigmatized. Everyone needs to know that it is okay to ask for help and, in the case of an emergency, where they can find it.

I thank you again for the opportunity to discuss this important piece of legislation and I look forward to seeing the

| 2560 | National Suicide Hotline Designation Act signed into law.        |
|------|--|
| 2561 | And with that, Mr. Chairman, I yield back.                       |
| 2562 | Mr. Doyle. The gentleman yields back.                            |
| 2563 | The committee now welcomes one of our most esteemed members      |
| 2564 | of the full committee to the subcommittee. Mr.                   |
| 2565 | Engel, you have 5 minutes.                                       |
| 2566 | Mr. Engel. Thank you. Thank you very much, Mr. Chairman.         |
| 2567 | Thank you for the opportunity to participate.                    |
| 2568 | I want to speak about an issue of critical importance that       |
| 2569 | has flown under the radar for quite some time, which is the      |
| 2570 | preservation of a lifesaving radio spectrum known as the T-Band. |
| 2571 | For decades, the T-Band has supported vital public safety radio  |
| 2572 | communications among our first responders. It allows police,     |
| 2573 | firefighters, and EMS providers to communicate even when cell    |
| 2574 | towers, electricity, or the internet are down. It functions deep |
| 2575 | underground in tunnels and inside concrete buildings.            |
| 2576 | But now, thanks to a provision of law passed back in 2012,       |
| 2577 | the FCC is required to relocate an auction the T-Band spectrum   |
| 2578 | for use by the private sector in 2021. This would endanger       |
| 2579 | crucial public safety communications, where in my district in    |
| 2580 | Bronx, New York, and Westchester, New York, as well as in major  |
| 2581 | metropolitan areas across the United States.                     |

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It would also force police, firefighters, and EMS providers

to spend billions of dollars, change their systems, and buy new equipment.

According to the National Public Safety Telecommunications Council and the GAO, roughly \$6 billion would be needed to relocate public safety users off the T-Band. The cost to the New York area alone would be \$1.4 billion.

In December 2019, FCC Chairman Pai underscored the importance of this issue by writing, and I quote him: The Agency has extensively analyzed the T-Band and concluded that moving forward is not viable. I am calling on Congress to repeal the T-Band mandate. I am hoping that Congress can resolve this matter without delay. Unquote.

The GAO agreed, reporting to Congress that the T-Band mandate is unworkable and could deprive first responders of their current ability to communicate by radio.

The urgent need to address the issue is clear. To further emphasize the point, I would like to submit some letters to the record, including a letter dated December 9, 2019 from the International Association of Fire Chiefs, the International Association of Firefighters, the National Sheriffs Association, the International Association of Chiefs of Police, the National Public Safety Telecommunications Council, the Greater Boston Police Council, the Los Angeles Regional Interoperable

Communications System, and others; a letter dated November 13, 2019 from the New York State County Executives Association; a letter dated October 8, 2019 from the New York State Association of Counties; a letter dated August 2, 2019 from the Police Commissioner of the City of New York; a letter dated July 2019 from public safety officials in Harris County, Texas; and a letter dated June 24, 2019 from the U.S. Conference of Mayors and the National League of Cities. I have more letters but I will stop for now.

To resolve this issue, I introduced the bipartisan Don't Break Up the T-Band Act. My legislation would repeal the 2012 provision of law that is at the heart of this problem and would allow law enforcement, fire officials, and EMS providers to continue using the T-Band spectrum to operate their radios for day-to-day lifesaving operations.

Mr. Chairman, for including my legislation in this hearing.

I understand that our ranking member, Mr. Walden, has also
introduced legislation, the FIRST RESPONDER Act, to address this
issue. I look forward to working with Mr. Walden and the rest
of our colleagues on the Energy and Commerce Committee to
harmonize our legislation and resolve this issue.

Today's hearing also includes other bills that are of critical importance to improve communication networks in times

of emergency. Included among them is the RESILIENT Networks Act, which picks up where the SANDy Act left off, and will ensure that communications networks are prepared for the worst.

Let me ask Mr. Gerst. Let me ask you this question. My city was New York City. It was devastated by Superstorm Sandy. The destruction was immeasurable. Can you tell me what lessons the wireless industry learned from the storm and whether we are better prepared today than we were back in 2012? In your view, will legislation in front of our subcommittee today help prepare us for future storms and rising seas?

Mr. Gerst. Congressman, thank you so much for the question.

Yes, Superstorm Sandy was sort of a touchdown moment for our industry and led to the development of the Wireless Resiliency Cooperative Framework, including through the leadership of Chairman Pallone. That Framework, its pillars were increasing coordination and collaboration between wireless providers who were competitive but they have done things since Superstorm Sandy like sharing resources, repairing each other's towers, making sure each other's customers can use service on each other's networks.

We have also increased local coordination through new best practices from the local governments and we have enhanced our consumer education tools all under the Framework because of

2652 Superstorm Sandy.

In my testimony, I go through a number of different examples of how we think our networks are stronger and we know that there is more that can be done. That is why we are supporting the goals of the RESILIENT Networks Act. It has some of the very similar pillars as our Framework. It has enhanced collaboration and coordination. It has making sure that wireless providers are using -- have reasonable and flexible expectations around roaming, mutual aid, and backup power, and it is forward-looking in terms of how can 5G advance resiliency.

So we are making steady improvements on resiliency in the wake of Superstorm Sandy.

Mr. Doyle. The gentleman's time has expired.

Mr. Engel. Thank you, Mr. Chairman.

Mr. Doyle. The chair requests unanimous consent to enter the following into the record: A letter from APCO; a letter from Craig Fugate, former FEMA Administrator; a letter from IAFF; a letter from Mental Health Liaison Group; a letter from NAB; a letter from the National League of Cities; a letter from U.S. Telecom; a letter from Reps Moulton and Stewart on H.R. 4194; a Chairman Pallone letter to the GAO about the 2017 hurricane season.

Without objection, so ordered.

| 2675 | [The   | information | n follows:    |
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| 2676 |        |             |               |
| 2677 | ****** | COMMITTEE   | INSERT******* |

| 2678 | Mr. Doyle. I want to thank the witnesses for their                |
|------|---|
| 2679 | participation in today's hearing.                                 |
| 2680 | I want to remind all members that, pursuant to committee          |
| 2681 | rules, they have 10 business days to submit additional questions  |
| 2682 | for the record to be answered by the witnesses who have appeared. |
| 2683 | And I would ask that each witness respond promptly to any such    |
| 2684 | questions that you may receive.                                   |
| 2685 | At this time, the committee is adjourned.                         |
| 2686 | [Whereupon, at 12:55 p.m., the subcommittee was adjourned.]       |