

# WIRELESS E-911 IMPLEMENTATION: PROGRESS AND REMAINING HURDLES

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## HEARING BEFORE THE SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET OF THE COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED EIGHTH CONGRESS

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## **WIRELESS E-911 IMPLEMENTATION: PROGRESS AND REMAINING HURDLES**

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**WEDNESDAY, JUNE 4, 2003**

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON ENERGY AND COMMERCE,  
SUBCOMMITTEE ON TELECOMMUNICATIONS  
AND THE INTERNET,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 10:10 a.m., in room 2123, Rayburn House Office Building, Hon. Fred Upton (chairman) presiding.

Members present: Representatives Upton, Stearns, Gillmor, Shimkus, Bass, Walden, Tauzin (ex officio), Markey, Rush, Boucher, Towns, Eshoo, Engel, Green, and Dingell (ex officio).

Staff present: Will Norwind, policy coordinator; Howard Waltzman, majority counsel; William Carty, legislative clerk; Peter Filon, minority counsel; and Voncille Hines, minority research assistant.

Mr. UPTON. Good morning everyone. I will remind my colleagues that if they choose not to give an opening statement, they get extra time on the first round of questions. I will not do so.

Good morning. Today's hearing is entitled Wireless E-911 Implementation, Progress and Remaining Hurdles. Every one of us will remember where we were on September 11th. I was with Senator Burns and my good friend and colleague, Congressman Gene Green at an E-911 press conference over on the Senate side. The press conference was abruptly interrupted as we scurried into another Senator's office to watch the terrible events of that day unfold before our eyes on TV and none of us will ever forget that day.

And I would say that among the many lessons learned on September 11th was that wireless E-911 not only is crucial for normal public safety emergencies, but also homeland security in the event, God forbid, of future terrorist attacks.

The events that day ushered in a welcome new era of cooperation and a redoubling of efforts amongst all of the various stake holders in the wireless E-911 universe. And I must say that the outlook is much better than it was 2 years ago when this subcommittee held its last hearing on wireless E-911. But make no mistake. We still have a ways to go and there are major hurdles ahead of us which we must clear.

Failure is not an option. No one should rest on their laurels, and we will continue to hold everyone's feet to the fire. We need maximum effort and cooperation and all of this is what brings us together today. There's a lot of talk lately about road maps in the

context of achieving peace in the Middle East. In the context of wireless E-911, we now have a road map provided by one of today's distinguished panelists, Professor Dale Hatfield. Among other things the Hatfield Report—Dale Hatfield. Among other things, the Hatfield Report observes the need for greater coordination in all levels of government, a lack of resources at the local level, and the fact that local exchange carriers are a critical piece of that puzzle.

Among the Hatfield Report's numerous recommendations, I am particularly interested in creating a national E-911 Program Office within the Department of Homeland Security. This will ensure crucial, unified Federal leadership and coordination across the country. In addition, we should make a significant Federal investment through grants to States to assist local public safety answering points, PSAPs in completing their wireless E-911 systems.

One of the starkest observations made in the Hatfield Report is that no matter how well the wireless carriers succeed in upholding their end of the bargain, if PSAP funding problems persist, deployment will be thwarted. Hence, Federal investments are crucial. However, we must stop States from raiding E-911 funds generated through E-911 surcharges on consumers' bills. So I propose that only those States which certify that they do not raid funds, would be eligible for these new Federal dollars. In addition, we need to further condition eligibility for such investments on the certification by States that they have, in fact, an E-911 Statewide Coordinator. The evidence suggests that those States with such coordinators have made much greater progress than those without. And such intrastate coordination should be a must.

Finally, let me say a word about wireless local number portability. I support wireless LNP as a general proposition. However, I do have concerns about its implementation at a time when we are asking wireless carriers to make E-911 their top priority. E-911 is a greater priority in my book, and we need to carefully weigh that balance. In closing, I want to especially commend our colleagues, John Shimkus and Anna Eshoo for their effort to launch the House E-911 Caucus. Their leadership in this area is tremendous, and I look forward to working with each of them. It is my hope that we can craft bipartisan legislation to help make full wireless E-911 deployment a reality.

As the subcommittee Chair, I am committed to moving such legislation. Time is of the essence, and I yield now to the ranking member of the subcommittee, my friend Mr. Markey from Massachusetts.

Mr. MARKEY. Thank you, Mr. Chairman, very much, and I want to commend you for calling this hearing this morning on wireless E-911 implementation. This is an issue that this subcommittee has been deeply involved in for a number of years, and today's hearing will provide an important opportunity to enhance our knowledge of that issue and to ensure that implementation continues and public safety is advanced.

When the subcommittee first started examining this issue just a few years back, only 40 million consumers had wireless phones. Today that number is over 140 million. We know that for many customers, wireless service has become a fungible substitute for their traditional wireline phone and is no longer seen as an ancil-

lary product. Increasingly, many consumers simply disconnect their wireline phone or they use their wireless phones almost exclusively, especially for long distance calls, which is why we are seeing the collapse of the long distance marketplace. The fact that more and more consumers see wireless telephones as a necessity, and less as a discretionary product, means that consumers will increasingly be relying on this technology. With over 140 million subscribers that is going to mean that an increasing number of emergency calls will be placed with wireless phones. Yet, it also holds out the prospect of dramatically reducing emergency response time, and as a result, saving many lives.

This subcommittee took action in 1999 and enacted legislation that designated 911 as the universal emergency number across the country, and also put in place consumer privacy protections when wireless carriers utilize wireless location information. The FCC, for its part, required wireless carriers to implement E-911, and we are now in Phase II of this implementation process. Wireless E-911 Phase II rules were originally due to be implemented by October of 2001, but this requirement was revised by the commission due to various alleged technological and economic impediments or difficulties. This hearing will give the subcommittee an opportunity to gauge the progress in the E-911 implementation, review problems that have been identified, as well as recommendations for resolving the remaining difficulties. This is an issue that has clear homeland security implications and can literally be a life or death issue for our citizens. The bottom line is that we need all the elements of the emergency response system to work together, including the wireless carrier, the encumbered wireline telephone company, the public safety answering point, the State, and local law enforcement municipal authorities and the FCC. And we need all those parties to work as efficiently as possible and without needless delay.

I thank you, Mr. Chairman, for calling this hearing.

Mr. UPTON. Thank you, Mr. Markey. Recognize the chairman of the full committee, Chairman Tauzin.

Chairman TAUZIN. Mr. Chairman, thank you very much. I want to thank you for this hearing and for the extraordinary way in which you and Mr. Markey have worked consistently. I think this is the second hearing since you assumed the Chair of the Telecommunications Subcommittee on this issue, and I applaud you for your continuing oversight. It is of extreme importance. I want to commend our friend Lieutenant Colonel John Shimkus for his leadership on this issue. As you know, he carried the bill through the House for this committee and deserves a lot of credit for it.

We have been involved, as you know, a long time on this issue. And it basically boils down to the simple equation. Can we take the search out of search and rescue? The search is the biggest part of rescue, and in every hearing we have had in every public safety testimony we have heard about the ability to save lives on the highways, in accidents and other injuries that occur on our Nation's highways, the search is the costliest part of the equation. The time lost in finding the individual before we can get emergency response help to that situation is a critical time that lives are lost and limbs are lost permanently and injuries become permanent injuries instead of temporary injuries. It is the most critical thing we

do in terms of saving lives on American highways, and additionally, helping to prevent all sorts of other grievous injuries to people in our society on the walkways and byways and places where joggers are assaulted and raped and murdered in many cases. The bottom line is, we can't wait much longer for the E-911 to be fully implemented. And I want to commend the commission for being as tough as it has been on the wireless carriers to move them along, but we must recognize, as I know this oversight hearing is designed to do, that a great many of the promises that were made to us in E-911 technologies, have not yet been delivered.

And we are waiting for those promises to be kept. Every day they are not kept, somebody loses a life. The cost of the search is too expensive and the recovery and the emergency response comes too late. It gets down to that simple equation. Someone's loved one is at stake every day that these promises are not kept.

Finally, I want to say a word about cost recovery. PSAPs cannot buy E-911 services from local exchange carriers without proper resources. And I applaud Mr. Hatfield for identifying the importance of the LEC side of the equation in the E-911 development deployment debate because if the lacks in PSAPs are not adequately resourced in the deployment of these services, even the promises of the technology will not answer the questions that this committee will continue to ask as we oversee the deployment of E-911 in America. We will not have the ubiquitous E-911 deployment if PSAPs simply do not have the resources and the services they need to receive the E-911 data. Now, PSAPs will be ready if States and localities stop raiding E-911 cost recovery mechanisms.

Very soon on the House floor, our committee will take up the spectrum relocation trust fund, which we have worked out, now, with the Budget Committee and the Appropriations Committee. We set up a separate trust fund to make sure those funds are not raided. They are available to relocate spectrum, when spectrum is necessarily relocated for the benefits of services like emergency response services. But when we set up monies and set up resources for something as important as this to happen and then States and localities raid those funds, and delay the implementation of this kind of a system for America, then every decision to raid those funds is directly related to somebody's loss of life on the highway; to the inability of somebody to find somebody to get to them fast enough to take care of a serious problem. And somebody ought to think about that before they raid these funds. And I want to applaud the chairman and Mr. Markey and all the members of this committee for standing shoulder to shoulder to do what we can and make sure this raiding stops, the system gets deployed, the promises are kept, lives and limbs are saved again under the plan for the ubiquitous 911 coverage that we have been promised in this country.

Thank you, Mr. Chairman.

Mr. UPTON. Thank you very much. We recognize the gentleman from—

Chairman TAUZIN. Mr. Chairman, if you don't mind, I missed doing something extremely important. I wanted to welcome James Callahan of MobileTel in my district in Larose. James, welcome. Larose is one of those little rural places that is desperately waiting



along with most of America for this kind of a service. James, thanks for being here today to tell us your story from a very small little part of the Cajun country that's going to benefit when this committee gets its work done.

Mr. UPTON. He had a little influence of getting here.

Would recognize the gentleman from the great State of Michigan, Mr. Dingell.

Mr. DINGELL. Mr. Chairman. Thank you. Good morning. Mr. Chairman, I commend you for holding this hearing. This will give the subcommittee a chance to take a critical look at how enhanced 911 service, known as E-911, for wireless telephones is being deployed in the United States. Enabling 911 talkers and public safety answering points, PSAPs, to determine the location of wireless 911 calls will not only save lives, but it will enhance the safety and security of every American.

Deployment, unfortunately, has been delayed. And frankly, all stakeholders must do better. This subcommittee held a similar hearing 2 years ago. At that time, not one PSAP was able to determine the location of a wireless 911 call. Since then the public safety community and the wireless industry have made measured progress, but there is a lot left to do.

Today, approximately half the 5,300 primary PSAPs comply with FCC's Phase I requirements, which means they receive the telephone number of the wireless phone from which a 911 call is being made, as well as the nearest cell site. This is critical information in the event that a call is disconnected prematurely. Eight States and the District of Columbia, however, are without a single PSAP that is able to receive Phase I information. Additionally, roughly 400 PSAPs across the country can now locate wireless callers as required under Phase II. But again, 24 States and the District of Columbia are without a single Phase II compliant PSAP.

These figures are troubling. Many of the 135 million wireless phone users who have purchased wireless phones did so for safety reasons. Moreover, a growing number of wireless users are canceling wireline service to their homes and switching to wireless service. When most consumers dial 911 from a wireless phone, they expect that the emergency responders will automatically locate them, just as if they had made the call from a wireline phone.

There has been no shortage of excuses for delays in wireless E-911 deployment. In an effort to obtain an independent analysis of the true problems involved in the E-911 deployment, the FCC commissioned Mr. Dale Hatfield, the former Chief of the Commission's Office of Engineering and Technology, to conduct a thorough analysis of this complex issue. We are fortunate to have Mr. Hatfield at the witness table today, as well as Mr. John Muleta Chief of the Commission's Wireless Telecommunications Bureau.

Welcome gentlemen. Thank you. These witnesses will provide this committee with an update on the progress that has been made since the Hatfield Report was released last October. It is encouraging to see that there are other stakeholders here today. Everyone should know that this subcommittee is monitoring this issue to ensure that the difficulties encountered with the deployment of this life saving service will soon be resolved. I want to commend Representatives Eshoo and Shimkus for their fine work in establishing

the Congressional E-911 Caucus. Their efforts have received and have raised the awareness of the significant number of issues involved in implementing E-911 and will help focus the attention of Congress on overcoming the challenges that have slowed the implementation of both wireless and wireline E-911 across the United States.

Thank you again, Mr. Chairman, for holding this hearing. I look forward to the testimony from each of the witnesses.

Mr. UPTON. Thank you. Mr. Shimkus.

Mr. SHIMKUS. Thank you, Mr. Chairman. First of all, I would like to ask that—I would like to submit this letter from NENA that was sent to the E-911 Caucus for the record.

Mr. UPTON. Without objection.

[The information referred to follows:]

NATIONAL EMERGENCY NUMBER ASSOCIATION  
COLUMBUS, OHIO 43230  
March 27, 2003

The Honorable CONRAD BURNS  
United States Senate  
187 Dirksen Senate Office Building  
Washington, DC 20510-2603

The Honorable HILLARY RODHAM CLINTON  
United States Senate  
476 Russell Senate Office Building  
Washington, DC 20510-3203

The Honorable ANNA ESHOO  
United States House of Representatives  
205 Cannon House Office Building  
Washington, DC 20510-0514

The Honorable JOHN SHIMKUS  
United States House of Representatives  
513 Cannon House Office Building  
Washington, DC 20515-1319

DEAR CONGRESSIONAL E9-1-1 CAUCUS CO-CHAIRS: Those of us in the public safety community have long believed that development of a robust nationwide E9-1-1 system for wireless telephone calls is one of the most important components of a nationwide plan to promote national security and public safety. The accomplishment of this goal will require close coordination among public safety officials, the wireline and wireless telephone carriers, and relevant government officials.

While there is much to applaud in the many ongoing efforts to implement E9-1-1, the goal of E9-1-1 “anywhere and everywhere” remains elusive. For this reason, we applaud your leadership and initiative in launching the Congressional E9-1-1 Caucus, to educate members of Congress and advance the deployment of ubiquitous E9-1-1 service in our nation. For this same reason, we strongly encourage and support the Federal Communications Commission (FCC) in its efforts to provide resources and leadership to ensure a fully functional E9-1-1 system.

*We believe that in supporting new telecommunications services and regulations, ubiquitous E9-1-1 deployment should always be our number one priority.*

In the current reality of heightened emergency risks and alertness, it is critical that we avoid imposing any non-safety regulations and requirements that might hinder the development and deployment of E9-1-1 service. From the inception of new technology, to the detail and complexity of public policy, the safety and security of the public must be of paramount importance.

As a nation, we have long demonstrated this priority. An example from the recent past was the deployment of resources and services to achieve a safe, smooth “Y2K” transition. Governments and industry were presented a monumental challenge with a hard deadline, but through the collaboration and hard work, we as a nation were able to ensure the safety and security of critical infrastructure and systems. Given that lives, property and our safety are at stake, E9-1-1 should be given the same level of priority.

We do not oppose regulations or policies that are designed to enhance the convenience and service options available to consumers, private industry and others. But we are far more concerned about the safety of millions of Americans who may someday use their wireless phones in emergency situations.

We urge the Congress to take steps to ensure that wireless E9-1-1 is our number one priority before moving forward with non-public safety and homeland security telecommunications rules and regulations.

Sincerely,

JOHN MELCHER  
*NENA, President*

cc: The Honorable John McCain  
The Honorable Ernest Hollings  
The Honorable W.J. "Billy" Tauzin  
The Honorable John Dingell  
Association of Public Safety Communications Officials International  
National State Nine One One Administrators  
Cellular Telecommunications and Internet Association  
United States Telecom Association

Mr. SHIMKUS. And second, I would like to thank you for the hearing and its—we are obviously moving forward and that's what we need to do. We did form an E-911 Caucus, along with obviously my colleague Anna Eshoo and Senator Burns and Senator Clinton, which we rolled out earlier this year with great fanfare, and now it is time to get down to work.

I also want to make sure that all members of this committee really look at joining the Caucus because that will continue to bring us strength. I know not all members are here, but many staffers are here, so they can get the word back to their member that Anna and I will be on the prowl trying to get more members to join the Caucus.

I want to, really, also recognize Mr. Hatfield. And I talked to him before the hearing began. Had it not been for his report, I guess we would have moved forward but it was really one of those great opportunities for a report to really create some excitement, identify problems. And I think Mr. Chairman, as you mentioned in your opening statement, as we move legislation, a lot of it will be based upon what Mr. Hatfield did in his report. And I want to make sure I publicly commend him for that.

We also have Steve Seitz here from NENA, who is not only doing the work up here, but he is actually working with the stakeholders throughout the country from the cellular companies, to the local exchanges, to the PSAPs and he has got some great success stories, and I look forward to this hearing. I will just end by saying I am concerned, as many people would know, about the local number portability issue, taking away capital for the role out of Enhanced-911. I mentioned it to the chairman. He said he would help me look at the issue and, hopefully, we can move on prioritizing our needs, and I think some of the comments will be raised on that issue.

I am glad Mr. Callahan is here. I have a small rural company called First Cellular, Terry Addington is the President. The problem in rural America is that, first of all, we don't have full coverage in a lot of areas. I know I don't have in the deep part of southern Illinois, so as we try to get full ubiquitous coverage and then overlay location identification information, that's a great capital expense. We don't really always have the population to sustain that. So the question is funding and financing, and I hope we will get some ideas after this hearing.

Thank you, Mr. Chairman, for joining with us to work diligently on this issue. It is a winner. It saves lives and it is an exciting time, and I look forward to moving legislation rapidly, and I yield back my time.

Mr. UPTON. Thank you. I would recognize Mr. Boucher.

Mr. BOUCHER. Thank you very much, Mr. Chairman. I want to commend you for scheduling today's hearing on a very important public safety matter. Since the last hearing that our subcommittee held 2 years ago, there has been notable cooperation between the public safety authorities and the wireless carriers in both the Phase I and the Phase II development of E-911 services. And one thing that I think we can do today is congratulate these entities on the successes that they have achieved so far.

Despite this progress, however, I have two concerns regarding the deployment that I would like to ask the members to consider, and I was pleased that the chairman of the subcommittee raised both of these matters during the course of his statement.

First, I am concerned that public safety answering points are not receiving the funding that is necessary to carry out their work. Today there are many areas where E-911 has yet to be implemented, not because the wireless carriers are incapable of providing the information, but because the PSAPs are technically limited in their ability to receive the information. The PSAP community needs funding to upgrade systems to receive the precise location information from wireless calls. In some States, that funding has been made available. In too many States, the funding has been diverted to other projects or diverted for the purpose of balancing budgets. In order to assure that Phase II deployment continues in a timely way, Congress must ensure that the funding that is required is made available to the answering point entities.

My second concern relates to the effect that implementation of wireless number portability may have on the ability of wireless carriers to deploy E-911 in a timely way. Frankly, I question the need for costly number portability mandates for wireless which is already a fully competitive telecommunications sector. No doubt, portability is a consumer convenience, but it is not required to promote the higher value of achieving competition in this industry as, perhaps arguably, it is for the wireline industry. And I have no doubt that a regulatory insistence on number portability will detract from the more urgent need to deploy E-911 services.

Mr. Chairman, I would simply note these two concerns for the benefit of the subcommittee members. I hope that our witnesses perhaps will comment on these two matters during the course of their testimony today. And I want to thank you, again, for scheduling the hearing on a very timely subject.

Thank you. I yield back.

Mr. UPTON. Thank you. Ms. Eshoo.

Ms. ESHOO. Thank you, Mr. Chairman, and good morning to you and to all of my colleagues here today and to all of the witnesses. Thank you for being here.

Mr. Chairman, I think that it is very important that you are holding this hearing, and I thank you for your leadership on it, and of course, to my cochair colleague of the E-911 Caucus, John Shimkus. I want to salute him because he has been a terrific part-

ner. And I think that it is important to state that he has been a long time partner on this, not just a recent E-911 person convert. But there is room for that as well on the committee and in the Congress.

I have been working on this issue since 1996, and that is now some time ago. I introduced legislation then to ensure that public safety entities would have the same ability to locate a wireless call as they did a wireline call. And I would like to draw, and I think that others have as well, draw specific attention to that time line. It has been 7 years, 7 years since we first directed the attention of the Federal Government to this issue, so of course it is disappointing, it is understandable in some areas, but it is still overall disappointing that so much time has passed, and we still don't have widespread deployment of E-911. We know that there are consequences and the consequences are lives unnecessarily lost.

In 1998, the committee held a hearing on E-911, and one of the things emphasized was the need for PSAPs to upgrade their equipment. That was 5 years ago. And PSAP readiness is still demanding our attention. So I think that even though we have talked about this for a long time, and there has been some attention that's been drawn to it, we have to really get into the kind of the messy mundane details of all of this so that we can launch legislation that will be fair to everyone but that there will, in fact, be deployment of this. Many, if not most, users of cell phones, especially I think women, buy phones for added security. So when they make a 911 call, it will bring help quickly. We all know this. And all we have to do is look to our own families and we understand it. There are over 140,000 wireless 911 calls made each day in our country. That's a lot of telephone calls, 140,000 wireless 911 calls each day, representing over half of all 911 calls. Each one of them, I think, could be determined to be one of the most important calls that someone would make.

So I think to summarize where we are right now, yes, we have an E-911 Caucus. Now, we know as members that there are lots of caucuses in the House. Many of them never meet. They may send out messages, there are a few that stand out that have really, and I am looking at my colleague, Rick Boucher and the Internet Caucus. I am not running down any other caucus, but we have really taken ahold of this issue and have had hearings, made sure that there is a counterpart in the Senate and there is a great deal of interest in this.

So I think that that is important in terms of the interest of the Congress within our own organization, so to speak. We are looking at writing legislation that will authorize funding to enhance the public communication entities. Right now, the dollars that are collected on the bills that people pay, those dollars are really being siphoned off by many States. It is not the case in New York, where they have had corrective legislation, but I am sorry to say it is the case in my own State, in California. Now, if the infrastructure as it were, is not built and supported by a constant flow of dollars, then, most frankly, the system is not going to work. So Mr. Chairman, you have offered some ideas today. We want to work with you and all of our colleagues. We want you all to join the Caucus. No. 1, we want you to be stepped up partners to legislation that is real-

ly going to put in place not only a homeland security system, but a hometown security system for our people. So I look forward to working with you on that, and I want to thank most especially Dale Hatfield for the extraordinary work that he has done out of his writings and his research and investigations. Both Chairman Shimkus and myself and others in the Caucus have taken his recommendations and built them into the legislation that we are offering.

So thank you, again, for the hearing, and let's go. We don't want to go into the 8th year, the 9th year, the 10th year, the 11th year of this issue. I think that we have the capacity to get this done. Thank you.

Mr. UPTON. The gentlelady's time has expired. The gentleman from Florida, Vice Chairman, Mr. Stearns.

Mr. STEARNS. Good morning. And thank you, Mr. Chairman.

Since our last hearing on this subject in June of 2001, we have witnessed dramatic events to say the least, that have highlighted the critical importance of Enhanced-911 services for local communities, States and our national security.

We have seen significant progress in the roll out of E-911, but as we will hear from our witnesses today, numerous hurdles remain as we progress from Phase I to Phase II implementation of wireless E-911. Professor Hatfield, appearing before us today completed an exhaustive report on the various issues affecting the roll out of E-911. In particular, one of the problems he noted was a lack of State coordination. He notes that, "A number of States have failed to establish a statewide coordination body and or appropriate cost recovery mechanisms." I believe this to be one of the greater hurdles facing E-911 for the most part. That particular issue is being addressed in my home State, however, of Florida. Florida is the largest State recently recognized by the public safety wireless network for the improvements in State interoperability in the past 2 years. Furthermore, despite budget constraints, Governor Bush appointed a statewide E-911 Coordinator and cost recovery mechanisms to distribute funds to local governments to upgrade their infrastructure.

So far, all wireless carriers in 19 Florida counties have implemented Phase I, and six counties are underway with Phase II, the costliest phase. Though Florida is not the only proactive State in coordinating E-911 implementation, I believe it is a good example, Mr. Chairman of the need to establish wireless priorities and move in a pragmatic manner to ensure that the time needed to respond to a 911 emergency is not hindered due to technological or cost limitations, especially with the number of wireless 911 calls increasing among all emergency calls placed.

Mr. Chairman, we are making progress and rolling out E-911 and the hard work of the States and wireless companies, local exchange carriers and the Federal Government is beginning to show. I look forward to our testimony from our witnesses and their insight into how we can improve upon the on going efforts to ensure 911 responders are given the technological tools needed for public safety.

Thank you, Mr. Chairman.

Mr. UPTON. Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman for calling this hearing to push for progress on this critical public safety issue. I would like to sincerely thank all our panelists today, but particularly my friend John Melcher from Houston, President of the National Emergency Number Association. John and I have worked on 911 since, well since the early 1980's, I guess. First our local service in Houston, Harris County, then State coverage and now E-911. Having been involved in the creation of 911 services for the greater Houston area from the beginning, I know that public attention to this issue has saved countless lives. With the explosion of wireless communications, Enhanced-911 is a natural critical next step. My hometown of Houston is part of the greater Harris County 911 Emergency Network, a special emergency communication district encompassing 47 cities, including Houston and our unincorporated areas also. As of February this year, Houston has the proud distinction, in large part to Mr. Melcher's efforts, to be the only major metropolitan area to have all six major wireless carriers providing location technology for wireless 911 calls. In Harris and Fort Bend counties, Phase II is completed. And again, knowing John for all of these years, it wasn't always an easy route to go. AT&T wireless, Cingular Wireless, Verizon, Nextel, Sprint and T-Mobile, along with our local exchange carrier, SBC, deserve credit for achieving this goal at a time of poor general economic performance and competing regulatory demands on their service.

When the FCC considers additional requirements for wireless carriers, I hope they will keep their focus on E-911. Everyone should be able to agree that the primary focus should be the saving of lives. Wireless 911 does save lives. Mr. Dale Hatfield, a witness here today, in his report reveals that wireless 911 calls account for one third of the total, and callers often cannot provide their location. And as Chairman Upton said, on September 11, 2001, I was at that E-911 event with Senator Burns and after that terrible day, the need and Federal interest for E-911 for terrorist response has increased. Progress must be made.

In our June 2001 hearing, we heard that 2005 was a good target for widespread implementation, at least in the urban and suburban areas. I look forward to learning whether we are on track nationwide, and what we can do to get it done faster. I would like to point out two conclusions and recommendations in the Hatfield Report that I think deserve extra attention today.

The first is the conclusion that E-911 needs a Federal champion and the recommended solution of an office in the Department of Homeland Security. I completely agree that a more robust Federal coordinating effort is needed, but I am concerned that the Homeland Security office may be over burdened. In an agency that size, this office could easily be lost, and there are congressional oversight issues. Our Homeland Security Committee may already have a full plate.

The second conclusion is that the wireless infrastructure that conventional and wireless networks rely on is antiquated in large parts of the country and may not withstand increasing volumes for many years. On this, I fully support Mr. Hatfield's recommendation that local exchange carriers be brought closer to the E-911 process in efforts to be made to address their recovery.

Mr. Chairman, I look forward to hearing the panelists today, and again, thank you for having the hearing.

Mr. UPTON. Mr. Walden.

Mr. WALDEN. Mr. Chairman, I am going to forgo an opening statement.

Mr. UPTON. Mr. Rush.

Mr. RUSH. Thank you, Mr. Chairman. Mr. Chairman, I want to commend you for holding this timely hearing on the progress and remaining hurdles of E-911. And I would also like to commend the FCC, the public safety community, the Congressional E-911 Caucus and the wireless carriers for their leadership in making E-911 a reality.

As you know, the wireless carriers are required under the commissions rules to deploy E-911 technology in accordance with set implementation deadlines. I am pleased to see that many carriers are well on their way in implementing Phase I and Phase II of the imposed deadline. However, it is quite clear that implementation of E-911 is not yet complete, due in large part to the readiness of PSAP equipment, ILEC capability, and the type of location technology being used.

I believe that States can play an important role in the deployment of E-911 by making it a part of their statewide plans for deployment. In my State alone, the State of Illinois, we have made significant progress in both Phase I and Phase II because our State leaders made E-911 a priority. However, aside from this being a priority, there are still 21 counties in the State of Illinois that do not have basic E-911 services. So as you can see, we have much to do to make E-911 a reality. We must provide State and localities with the necessary funding to upgrade their PSAP. There still remains many challenges to the E-911 program, but we must not lose sight that E-911 saves lives. It is well documented that more than 30 to 50 percent of emergency calls are made from wireless phones, and it is not unreasonable to estimate that this percentage will only increase, thus it is imperative that we do all that we can to get this program implemented so that first responders are able to locate these 911 emergency callers.

I look forward, Mr. Chairman, to hearing the views of our distinguished panelists, and I yield back the balance of my time.

Mr. UPTON. Thank you. Mr. Elliott. It is Mr. Engel. Elliott is recognized.

Mr. ENGEL. Thank you, Mr. Chairman. You can call me whatever you like since we are friends. And I appreciate having the opportunity to give an opening statement.

You know, I have just gotten back from North Korea, 13-hour time difference. In North Korea, an oppressive regime rules with an iron fist, so it feels really good to be back. I want to note this on the record because for the days that I was in North and South Korea, my cell phone didn't work because the Koreans use a different technology than we do, and I don't have a multisystem phone yet. But I hope to get one in the future.

Mr. UPTON. Did your Blackberry work?

Mr. ENGEL. I left it home. Talk about a fish out of water. This hearing is about implementing a vital technology within the United States wireless phone industry. The Cellular Telephone Industry



Association has done, in my opinion, an admirable job highlighting people across the country who have used their cell phones to call for help. As E-911 is implemented, it will enable emergency personnel to quickly and reliably respond. But this is a joint public-private effort.

Recently, New York lost four young men who were adrift off City Island in the Bronx, where I am from. They were able to use the cell phone to call for help, but couldn't identify where they were. The locating technology was not available, and, sadly, four young lives were lost. They called and quickly were cutoff, and we believe if the technology had been in place, we think that their lives could have been saved. The emergency operator and supervisor of the center chose not to send help, and this was a terrible tragedy. A greater tragedy, of course, is that it could easily happen again.

The National Emergency Number Association was kind enough to drop off a huge binder in my office. I have it here, detailing county by county, in New York, E-911 rollout in the entire State. Since my district encompasses three counties, I found that information very useful, but I also found it very disturbing. According to their data, six of the seven wireless carriers have Phase I service ready to go but—and it is a big but—there is not one PSAP in all of the Bronx that is E-911 ready.

My own State has collected hundreds of millions of dollars in taxes on cell phones. This money was supposed to be used for upgrading the public safety answering points with new cell phone technology. Instead, it was misappropriated and used for anything but. I request unanimous consent to enter into the record an audit by the New York State Controller of New York's E-911 funding.

Mr. UPTON. Without objection.

[The audit report is available at <http://www.osc.state.ny.us>]

Mr. ENGEL. Thank you. So now it is appropriate that that the subcommittee is holding an oversight hearing, and I commend you for doing so, Mr. Chairman. We have been tough on the wireless industry on rolling out this technology and be sure, we will continue to do so. However, we must also be tough on the States and localities to do their part as well. This is no longer just a convenience issue. It is not just a life safety issue. This is a vital part of our efforts to secure our country. And I thank you very much, and I look forward to the testimony.

Mr. UPTON. Thank you Mr. Engel. At this point opening statements from the members are over. I will make a unanimous consent request that all members of the subcommittee will be able to put their opening statement into the record.

Mr. Bass do you have an opening statement?

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. PAUL E. GILLMOR, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF OHIO

I thank the Chairman for the opportunity to address this important issue.

The number of cell phone users continues to grow, currently standing at more than 140 million with an increasing amount of households replacing their wireline with wireless service. More importantly, a 1/3 of 911 calls, representing up to 170,000 each day, come from a cell phone.

Delays in implementing E911 capabilities persist emergency after accident across the country, even after many states have collected varying taxes to pay for such a

service. We have all heard reports with regard to often unfortunate results when a local dispatcher is unable locate a cell phone user calling 911.

Van Wert County in my rural Ohio district is currently implementing Phase I of E911, essentially providing a nearby dispatcher the caller's cell phone number and nearest cell tower, narrowing the person's location to a couple blocks in a city, or in my district, within a few square miles. Less than 3% of counties in Ohio have implemented Phase II deployments. While requiring extensive upgrades by wireless carriers, dispatchers, and local phone companies, with Phase II E911 a caller could be pinpointed within 160 to 330 feet.

As there has been progress of late, I look forward to hearing more about the efforts of wireless carriers, local phone companies, dispatchers, and the FCC to further deploy these vital technologies.

Again, I thank the Chairman and yield back the remainder of my time.

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PREPARED STATEMENT OF HON. BARBARA CUBIN, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF WYOMING

Thank you, Mr. Chairman.

I would like to thank you for holding this hearing to assess where we are in the implementation of a fully-functioning wireless Enhanced 911 system. With over 140 million Americans owning wireless phones today, there is no question that the deployment of wireless E-911 is a pressing priority and part of the foundation of homeland security. Additionally, with an increasing number of folks disconnecting their landline telephones, and being fully untethered, the benefits of America's mature wireline E-911 are available to fewer and fewer households each day.

That's why I am looking forward to the testimony from our broad-based panel about the hurdles that have impeded the rollout of ubiquitous E-911 coverage and how we can smooth the path going forward. I understand that the marketplace does not always meet a federal agency's timetable, especially when it involves technological innovation. But the availability of proven, reliable technology does not appear to be the only impediment to full rollout, but one of several that I've been told about from wireless companies in Wyoming and nationwide. The diversion of funds earmarked for E-911 to other state spending programs, the broad and affordable availability of the technological solutions to meet the programmatic deadlines, and the unique challenges that rural providers face are concerns to me as well.

I am particularly pleased to be hearing from a Wyoming neighbor, Mr. Hatfield from the University of Colorado, who will present testimony on his findings and recommendations as the leader of an independent inquiry into the implementation of E-911. I am interested in hearing your comments on how rural America is proceeding in meeting these deadlines and how small, rural providers are faring in efforts to comply with FCC mandates.

As a result of this hearing, I want to know what we can do now, in the 108th Congress, that can help companies run the last mile of this marathon and give wireless consumers the safety and peace of mind that wireless E-911 promises. I also want to ensure that there is not an antagonistic relationship between wireless carriers and the FCC. Instead, there needs to be cooperation among all of the stakeholders and the Commission to ensure the proper final implementation of wireless E-911 while preserving the rich variety of competitors providing wireless services across the nation.

Thank you Mr. Chairman, I yield back the balance of my time.

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PREPARED STATEMENT OF HON. BART GORDON, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF TENNESSEE

Mr. Chairman, I commend your leadership and foresight in scheduling this very important hearing today on E-911.

Every day, our nation's 911 operational centers and professionals save countless lives and improve long-term quality of life following emergencies through the work they do. The availability of wireless E-911 has moved emergency response to a new level.

Nationwide, more and more people are using wireless E-911 to help save a life or report a crime. Almost 50% of our nation's 911 calls now come from wireless phones. In my home state of Tennessee, more than 50% of 911 calls now originate from wireless phones. This calls attention to importance of ensuring that wireless E-911 is available to all wireless consumers, particularly those living in rural areas.

I am very proud that Tennessee continues to be recognized as a national leader in E-911 deployment. Tennessee was one of the first states to have more than 90%

of its counties ready to receive E-911 Phase I data. As of today, 71 of 95 counties in my state are ready to receive and utilize E-911 Phase II data from wireless carriers. At least one wireless carrier is providing live Phase II data in 68 counties. Our state 911 leadership expects to have near 100% of our counties E-911 ready by the end of this year. The impressive accomplishments of my state's 911 leaders are largely due to one single factor—commitment.

Our state is vastly rural and its terrain very diverse. This poses great challenges in providing reliable wireless E-911 service. Notwithstanding these challenges, our state's 911 leadership conducted a trial in part of my district with multiple wireless companies using network and GPS E-911 solutions. The trial was a success—often surpassing the FCC location standard to within a few feet. The importance of this trial is that it was conducted in the Cumberland Plateau region, some of the most challenging terrain for receiving terrestrial and satellite-based signals east of the Mississippi River.

Although we enjoy these successes in Tennessee, we still have work to do. Our state's 911 leadership will not rest until the job is done. New issues and challenges emerge every day. Some of those fall within the purview of the FCC and Congress. I look forward to working with our state's 911 leadership on these and other issues. I hope that our accomplishments may serve as some guidance or encouragement to other states and localities to commit to getting the job done.

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PREPARED STATEMENT OF HON. ALBERT WYNN, A REPRESENTATIVE IN CONGRESS  
FROM THE STATE OF MARYLAND

Mr. Chairman, thank you for holding this hearing.

Enhanced 911 service, or E-911, is an emergency telephone service equipped with new features. The addition of Automatic Number Identification and Automatic Location Identification will allow emergency service personnel to respond more efficiently and more rapidly. As consumers move away from wire line phones due to high cost and lack of flexibility, these services become more vital to our way of life.

My primary concern regarding E-911 is that it appears that many states are not making Phase II implementation a priority and are raiding their E-911 accounts. These funds, intended to prepare Public Safety Answering Points, or PSAPs, to utilize new location technology, are raised through wireless phone taxes. Unfortunately in the absence of significant federal aid, some states have used these accounts to supplement budgets and rainy day funds.

The gap between the progress of E-911 technology and the PSAP site technology is preventing states from adequately investing in the system. Most wireless carriers are ready to bring wireless E-911 technology online, but are unable to do so because the PSAPs do not have the tools to support available technology. This is distressing because the wireless industry has provided millions of dollars to purchase and install the technology.

Public safety and saving lives must always be our first priority. E-911 technology can enable us to move into a new era for emergency search and rescue.

It is time for state and local entities to provide sufficient resources to realize this essential service that will better equip us to more efficiently save lives.

I look forward to hearing from our witnesses to learn more about the steps that are being taken to bring E-911 online sooner.

Mr. UPTON. We will now begin with our panel. And we have a very good number of folks that are here today, and we look forward—first of all, we appreciate you submitting your testimony on time so we were able to read it in advance. Your statements are made part of the record in their entirety, and we will limit your remarks, opening remarks, to 5 minutes and then we will begin with members here. We are joined by Mr.—first by Mr. Dale Hatfield, Professor Department of Interdisciplinary Telecommunications at the University of Colorado at Boulder; Mr. John Muleta, Bureau Chief Wireless Telecommunications of the FCC; Mr. John Melcher, President of the National Emergency Number Association; Mr. Karl Korsmo, Vice President of External Affairs for AT&T Wireless; Mr. James Callahan, President and Chief Operating Officer of Mobile-Tel from Louisiana; Mr. Michael O'Connor, Director

of Federal Regulatory Policy from Verizon; and Mr. Michael Amarosa, Senior Vice President for True Position.

Mr. Hatfield, we will begin with you. Thank you for making the time to come out this way.

**STATEMENTS OF DALE N. HATFIELD, ADJUNCT PROFESSOR, DEPARTMENT OF INTERDISCIPLINARY TELECOMMUNICATIONS, UNIVERSITY OF COLORADO AT BOULDER ENGINEERING CENTER; JOHN B. MULETA, BUREAU CHIEF, WIRELESS COMMUNICATIONS, FEDERAL COMMUNICATIONS COMMISSION; JOHN MELCHER, PRESIDENT, NATIONAL EMERGENCY NUMBER ASSOCIATION; KARL KORSMO, VICE PRESIDENT OF EXTERNAL AFFAIRS, AT&T WIRELESS SERVICES; JAMES CALLAHAN, PRESIDENT & CHIEF OPERATING OFFICER, MOBILE-TEL, INC.; MICHAEL O'CONNOR, DIRECTOR OF FEDERAL REGULATORY POLICY, VERIZON COMMUNICATIONS; AND MICHAEL AMAROSA, SENIOR VICE PRESIDENT, PUBLIC AFFAIRS, TRUEPOSITION, INC.**

Mr. HATFIELD. Thank you very much. Mr. Chairman and members of the committee, I greatly appreciate the opportunity to appear before you today to discuss issues relating to the rollout of wireless E-911 service in the United States.

As you suggested, Mr. Chairman, I have submitted my full written statements for the record, and I will merely summarize that testimony now. Before I turn to the substance of my testimony, however, I want to emphasize that I am testifying here today solely on my own accord, as a private citizen, and that, consequently, the views I express, are strictly my own.

As has been noted in early 2002, the Federal Communications Commission retained me to conduct an independent inquiry and to produce an accompanying report to the agency on the technical and operational rules issues impacting on the provision of wireless E-911. My report was submitted to the Commission in October of last year, and is available, along with public comments on its substance, on the agency's Website. In addition to certain background material, the report I prepared for the Commission consists of a set of findings and recommendations. In my written testimony, I present an overview and commentary on my original report, and then offer some concluding recommendations for your consideration.

I will use the balance of my time here this morning to summarize those latter recommendations. In the findings section of the original report, I noticed a strong Federal interest in the nationwide availability of 911. The events of the recent past have clearly demonstrated that E-911 is not just an issue of safety of life and property on a local level, but one of critical importance to homeland security as well.

As has been stated here several times this morning, given the ever increasing proportion of calls originating from wireless devices and the growing substitution of wireless phones for wireline phones, the need for rapid deployment of wireless E-911 becomes more obvious every day. Thus one of the key recommendations of my report was that the Commission work with the administration and the then nascent Department of Homeland Security to estab-

lish what I referred to as a National E-911 Program Office. My thought was that the proposed office within DHS would be a focus of E-911 activity in the executive branch and serve as a key resource and advocate for the Nation's first responders on issues related to E-911 deployment. I am now even more convinced of the need for such an office. I should note that it was reported in the press that Chairman Powell has raised this issue of Secretary Ridge. However, in all candor, I have not had the opportunity to follow all of the subsequent developments in this area, nor to determine whether other institutional arrangements might be more appropriate. Congressman Green, in response to your comment, I think the key thing is the need for strong Federal leadership in this, and where the executive branch organizational set-up probably is less important than to make sure that it gets the attention it deserves.

Second, on a related topic, in passing the E-911 Act, the Congress directed the Commission, "to encourage each State to develop and implement coordinated statewide deployment plans through an entity designated by the Governor for the roll out of comprehensive end-to-end emergency communications infrastructure and programs." There is now evidence that suggests that such a statewide or regional coordinating entity is a key indicator of the success in the early deployment of wireless E-911.

Despite the clear congressional direction and despite this increasing body of evidence, some States have still not created a statewide E-911 Coordinator or its equivalent. While I am not a lawyer, it seems to me that the Commission itself has limited ability to require States to create such an entity. And hence I would suggest this subcommittee revisit this issue, given the very clear congressional intent and the benefits that apparently are achieved when such an entity exists.

Third, another of my key recommendations was that the Commission establish, or cause to have established, an advisory committee under the Federal Advisory Committee Act that would address the overall technical framework for the further development of an evolution of wireless E-911 systems. This recommendation was a reflection of, one, my finding that the responsibility for making critical decisions relating to network architecture were spread over a large number of stakeholders and multiple jurisdictions, and two, my concerns about the limitations of the current E-911 platform to evolve in response to new requirements and handle the growing volume of traffic.

While I am well aware of, and in my prepared testimony I call explicit attention to other private and public sector coordination activities that address aspects of these larger, longer-time network architecture issues, I still have serious concerns in this area. For example, since the submission of my report, I have gained an even greater appreciation of the relationship of wireless E-911 to not only homeland security, but to the reliable and seamless delivery of other information involving vehicular and personal emergencies relaying that information to first responders. This information includes: A, hazardous material or HazMat truck incidents; B, auto emergencies including for example, information from automatic crash identification systems; C, severe weather events such as tor-

nadoes and flash flooding. The proliferation of personal wireless devices and services including text messaging and PDAs with communications adds to the milieu. As another example, a product was recently described to me that will produce automatic notices of cardiac events with a latitude and longitude attached so that emergency personnel can be dispatched without delay. Similar devices can be used to find missing children or help prevent them from being lost in the first place.

Subsequent to the publication of the report, I have sensed some reluctance on the part of stakeholders to embrace the notion of the formal advisory committee to address these longer-term overriding issues. I believe this reluctance stems from timing—more from timing and support and other logistical issues associated with the formation of a formal advisory committee, rather than the goal that I articulated in the report.

However, my real concern is not the exact form of the institutional arrangements, as long as the decisionmaking takes place in a transparent process open to all stakeholders. In any event, I would urge the subcommittee to satisfy itself that the necessary institutional arrangements and resources are in place to address these longer-term issues.

That, Mr. Chairman, completes my testimony, and I would be happy to answer any questions of you at the appropriate time.

Mr. UPTON. Again, we appreciate your appearance here, and, certainly, every member truly appreciates your hard work and the completion of the report. Very, very good.

[The prepared statement of Dale N. Hatfield follows:]

PREPARED STATEMENT OF DALE N. HATFIELD, ADJUNCT PROFESSOR, UNIVERSITY OF COLORADO AT BOULDER

Mr. Chairman and Members of the Subcommittee: thank you very much for the opportunity to appear before you today to discuss issues relating to the rollout of wireless E911 service in the United States. As you may be aware, the Federal Communications Commission (“FCC” or “the Commission”) in early 2002 retained me to conduct an independent inquiry and to produce an accompanying report to the agency on the technical and operational issues impacting on the provisioning of wireless E911. In my testimony here today, I will summarize that report and provide some additional comments based upon developments that have occurred subsequent to its being released in October of last year. Before I turn to the substance of my testimony, however, I want to emphasize that I am testifying today solely as a private citizen and that, consequently, the views that I express are strictly my own.

The focus of the inquiry that I undertook for the Commission was on the future of wireless E911 deployment, including any obstacles to deployment and the steps that might be taken to overcome or minimize them. My inquiry began in the spring of last year with a large meeting of stakeholders, including service providers, technology manufacturers, and members of the public safety community. Over the succeeding months, I participated in scores of meetings and met with several hundred stakeholders that are working very hard to increase the safety of the American public through the further development and deployment of wireless E911.

As I mentioned a moment ago, my report was submitted to the Commission in October of last year and I have been deeply gratified with the generally positive response it has generated. The report—along with public comments on its substance—is available on the Commission’s website ([www.fcc.gov](http://www.fcc.gov)).<sup>1</sup> Since the report has been available for some months and in the interests of time, I will not go into detail on my findings and recommendations. Rather, I will first present a brief overview and

<sup>1</sup>The direct link to the report is: [http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\\_or\\_pdf=pdf&id\\_document=6513296239](http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6513296239).

commentaries on what I feel are the most important points and then offer some concluding remarks based upon more recent developments.

In the findings section of the report, I noted the strong federal interest in the nationwide availability of E911 and, on that basis, recommended that there be increased coordination between and among the relevant federal agencies. The events of the recent past have clearly demonstrated that E911 is not just an issue of the safety of life and property on a local basis but one of critical importance to homeland security as well. Given the ever increasing proportion of calls originating from wireless devices and the growing substitution of wireless phones for wireline phones, the need for a rapid deployment of wireless E911 becomes more obvious every day.

In the findings, I also raised concerns about the technical limitations associated with the existing *wireline* E911 infrastructure and—especially—with its ability to evolve smoothly and efficiently to address emerging requirements. Rather than delve into these limitations today, I would merely stress the need for a modern infrastructure that is not only capable of efficiently and effectively handling traditional wireline and wireless E911 calls, but one whose overall architecture facilitates the exchange of evolving types of emergency communications information between and among federal, state, and local agencies and the public that they serve. And, an architecture I might also stress that remains true to other public policy values such as competitive and technical neutrality and reliance on the competitive marketplace where possible.

This last commentary leads me to another major finding of the report. When I undertook the independent inquiry on behalf of the Commission, I was generally aware—from my earlier tenure at the agency—of what was involved in rolling out wireless E911. As I dug into it deeper under my new assignment, what really struck me was the overall complexity of the undertaking. As I pointed out a moment ago, a variety of critical technical and operational choices—including critical decisions relating to network architectures—must be made to ensure the reliable and seamless E911 system contemplated by Congress when it passed the Wireless Communications and Public Safety Act of 1999 (“E911 Act”).

The complexity is exacerbated by the fact that there is no single decision-maker—no master architect—for emergency communications systems. Instead, decision-making of this type is spread over a large number of stakeholders and multiple jurisdictions. Because of the total number of stakeholders involved, the complexity of the inter-relationships among the stakeholders, and the incentives and constraints on those stakeholders, I concluded—not surprising perhaps—that an unusually high degree of coordination and cooperation among public and private entities will be required if this nation is going to have the type of modern infrastructure I described and that I believe the Congress envisioned in passing the 911 Act. In the report, I pointed specifically to the need for coordination and collaboration among all stakeholders, public and private, in such areas as overall system engineering, project management, and the development and adoption of standards.

In another of the findings, I expressed concern that the rollout of wireless E911 service was being hampered by the lack of funding and other resources for Public Safety Access Providers—PSAPs—in many jurisdictions around the country. I pointed specifically to the lack of cost recovery mechanisms in some states, the lack of a “champion” within the Federal government, and residual awareness and readiness issues within the PSAP community. Unfortunately, perhaps, in the report, I used the term “PSAP fatigue” in referring to some of these issues and this was seen by some as a criticism of PSAP efforts. Exactly the opposite was true. It was meant to point out they needed more support in shouldering an enormous burden.

Another of the findings in the report related to the role of Incumbent Local Exchange Carriers (ILECs) in the provision of E911 services. I found that, despite the central role that these carriers play in some implementations of wireless E911 services, their responsibilities had not been adequately defined both in terms of their technical requirements and in terms of cost recovery. As an aside, I am pleased to note that in the past year the Commission has acknowledged these concerns and has taken steps to rectify them.

Lastly, I found that there appeared to be a lack of well-accepted, standardized tests for determining compliance with the Commission’s location accuracy requirements, including issues regarding geographic averaging. I went on to express the concern that this uncertainty could ultimately prove to be an impediment to the more rapid deployment of wireless E911 systems.

In light of my findings, I made several recommendations to the Commission and I will mention them briefly here.

*First*, recognizing both the strong Federal interest in the nationwide availability of E911 and the somewhat limited scope of the Commission’s jurisdiction, I recommended that the Commission work more closely with other Federal agencies to

encourage a coordinated approach in dealing with issues associated with the deployment of wireless E911 systems. More specifically, I recommended that it work with the Administration and, in particular, the then nascent Department of Homeland Security to establish what I referred to as a “National E911 Program Office.” As I envisioned it, the office within DHS would serve as a resource and advocate—or champion—for the Nation’s first responders on the issue of E911 deployment.

*Second*, I recommended that the Commission increase its own oversight efforts of E911 during this critical phase of deployment. To that end, I recommended that the Commission establish a formal advisory Committee that would address the technical framework and longer term network architecture issues associated with further E911 development and deployment.

*Third*, noting that my findings suggested that, in at least some situations, deployment of wireless E911 may be hampered by a lack of coordination and dialog among the stakeholder groups, I recommended that the Commission establish an “information clearinghouse”—for the lack of a better term—that would collect and disseminate information critical to deployment so that the stakeholders could better coordinate with one another. I also recommended that the Commission work with, and appropriately support, the efforts of public, private, and joint efforts aimed at speeding the rollout.

In March of this year, the Commission acknowledged this recommendation and announced its E911 Coordination Initiative to bring together relevant stakeholders to share experiences and devise strategies for expediting E911 deployment. On April 29—about a month ago—I was pleased to participate in the first public meeting associated with that initiative. I was particularly interested in an announcement made by the Commission at the meeting regarding E911 Tracking and Coordination Management. Since this effort is likely to be described in other testimony here today, I will simply say that it exemplifies the enhanced “information clearinghouse” role that I envisioned in my report.

While I am on this topic, let me digress briefly to say that, since the publication of the report, I have been gratified to see what I perceive as an overall increase in such coordination and communication among stakeholders and an associated general increase in the level of priority and awareness of the importance of E911 among policy makers, industry and the general public. In addition to the Commission’s own Wireless E911 Coordination Initiative which I just mentioned, other activities, which I believe you will also hear more about today, include the Department of Transportation’s Wireless E911 Steering Council, the Emergency Services Interconnection Forum jointly sponsored by the Alliance for Telecommunications Industry Solutions —ATIS—and the National Emergency Number Association—NENA, the Association of Public Safety Communications Officers’—APCO’s—Project Locate, and NENA’s Strategic Wireless Action Team—SWAT—Initiative. The latter, for example, provides a forum for communications among public safety organizations, wireless carriers, wireline carriers, state representatives and other participants. As I understand it, the course of action that they are following is intended to build on the input of the various stakeholders and to develop consensus recommendations among the various parties. Significantly, in my mind, it includes the resources to conduct supporting analyses to inform and shape the process. While I cannot—and should not—endorse any of the results that they are obtaining, I do believe that it represents the sort of collaborative process which is required for sustainable progress in E911 deployment to occur in an extremely complex environment.

Returning to my recommendations, my fourth suggestion was for the development of industry wide procedures for testing and certification of wireless E911 systems to ensure that they meet the Commission’s accuracy requirements. I also recommended that the Commission undertake to more clearly define those requirements to eliminate any remaining uncertainty as to what constitutes compliance.

I would like to close my testimony by making a few specific recommendations based upon the current situation in wireless E911 deployment. These concluding recommendations are not intended to be comprehensive; rather, they reflect some areas that I believe—based upon my inquiry and subsequent events—would benefit from the Subcommittee’s attention.

*First*, as I noted earlier, one of the key recommendations of my report was that the Commission work with the Administration, and the then nascent Department of Homeland Security, to establish what I referred to as a “National E911 Program Office.” My thought was that the proposed office within DHS would be a focus of E911 activity in the Executive Branch and serve as a key resource and advocate for the Nation’s first responders on issues related to E911 deployment. I am now even more convinced of the need for such an office. I should note that it was reported in the press that Chairman Powell has raised this issue with Secretary Ridge. However, in all candor, I have not had the opportunity to follow all of the



subsequent developments in this area nor to determine whether other institutional arrangements might suffice. Because of its importance, I would further urge this Subcommittee in its oversight and legislative role to ensure that the needs I identified in my inquiry are being met within the Federal government.

*Second*, on a related topic, in passing the E911 Act, the Congress directed the Commission to "...encourage each state to develop and implement coordinated statewide deployment plans through an entity designated by the governor..." for the rollout of "...comprehensive end-to-end emergency communications infrastructure and programs..." There is now evidence that suggests that such a statewide and/or regional coordinating entity is a key indicator of success in the early deployments of wireless E911. Despite the clear Congressional admonition and despite this increasing body of evidence, some states still have not created a statewide E911 coordinator or its equivalent. While I am not a lawyer, it seems clear that the Commission itself has limited ability to require states to create such an entity and, hence, I would urge this Subcommittee to revisit this issue given the clear Congressional intent and the benefits that apparently are achieved where such an entity exists. To my dismay, there have also been widely reported instances where state E911 cost recovery funds have been diverted to other, unrelated purposes. This is apparently true even though customers paying the itemized charge are likely to believe that the service is available to them. Again, I am unclear as to what jurisdiction, if any, the Commission has to deal with these instances but clearly it is an area that the Subcommittee may want to address.

*Third*, another of my key recommendations was that the Commission establish, or cause to have established, an advisory committee (under the Federal Advisory Committee Act) that would address the overall technical framework for the further development and evolution of wireless E911 systems. This recommendation was a reflection of my finding that the responsibilities for making critical decisions relating to network architectures were spread over a large number of stakeholders and multiple jurisdictions. While I am well aware of—and earlier in this testimony explicitly called attention to—other private and public sector coordination activities that address aspects of these larger, longer term network architecture issues, I still have serious concerns in this area.

For example, since the submission of the report, I have gained an even greater appreciation of the relationship of wireless E911 to not only homeland security but to the reliable and seamless delivery of other information relating to vehicular and personal emergencies to first responders—a point I alluded to earlier. This includes information involving (a) hazardous material (hazmat) truck incidents, (b) automobile emergencies including, for example, information from automatic crash notification systems, and (c) severe weather events such as tornadoes and flash flooding. The proliferation of personal wireless devices and services, including text messaging and personal digital assistants ("PDAs") with communications capabilities, adds to the milieu. As another example, a product was recently described to me that will produce automatic notices of cardiac incidents—with latitude and longitude attached. Similar devices that can be used to find missing children—or to help prevent them from becoming missing in the first place—are envisioned.

Subsequent to the publication of the report, I have sensed some reluctance on the part of stakeholders to embrace the notion of a formal advisory committee to address these longer term, over-arching issues. I believe this reluctance stems more from timing, support, and other logistical issues associated with a formal advisory committee rather than on the goal that I advocated. However, my real concern is not the exact form of the institutional arrangements as long as the decision-making takes place in an open and transparent process available to all stakeholders. In any event, I would urge the Subcommittee to satisfy itself that the necessary institutional arrangements and resources are in place to address these longer term issues.

That, Mr. Chairman, completes my testimony and I would be happy to answer any questions at the appropriate time.

Mr. UPTON. Mr. Muleta, welcome back.

#### STATEMENT OF JOHN B. MULETA

Mr. MULETA. Thank you. Good morning, Mr. Chairman, and members of the subcommittee. I appreciate this opportunity to appear before you on behalf of the FCC to discuss our work in support of deployment of wireless E-911.

This hearing is an important opportunity to encourage progress in this critical public safety matter, and I commend, in particular,

Representatives Shimkus and Eshoo and other members of the E-911 Caucus for their leadership in this area.

Whether calling from a regular wireline phone or a mobile phone, Americans today demand assurances from public officials that 911 calls will result in immediate assistance. This fact makes all too clear the importance of a speedy deployment of technology to insure automatic location identification. It is a crucial element in responding to the emergency situations described earlier.

Although few Americans even owned mobile phones prior to the last decade, public safety answering points, the PSAPs, now report that they receive 30 to 50 percent of emergency calls from wireless phones. Some PSAPs even reportedly receive up to 60 or 70 percent of their calls from wireless phones. Unlike wireline phones, where the callers location is identified through the address associated with telephone number, wireless phones, which are mobile, present additional technological challenges with respect to automatic location identification. I am here today to report on the Commission's progress in ensuring rapid wireless E-911 deployment, and to convey the fact that the chairman, the commissioners, and I all have E-911 implementation as one of our foremost priorities.

In the past few months, additional strides toward wireless E-911 deployment have been made. The deployment of wireless E-911 has never been intended to be a flash cut process, but a gradual phase-in over several years. Wireless E-911 is a very complex undertaking that presents new and unique technical challenges and requires a great deal of coordination among a very disparate group of governmental and commercial entities.

Despite these challenges, wireless E-911 is now becoming a useful reality. Deployment of Phase I service is very well underway. Of the Phase I requests received from PSAPs, the six nationwide carriers have on average today fulfilled approximately 75 percent of these requests. This is information coming from the latest quarterly reports as of the end of April of this year. In terms of the Phase II, the rollout of Phase II of the E-911 service, that depends in large part on when this PSAP makes a request to the wireless carrier for Phase II service. PSAPs must have the ability to upgrade their systems to receive the location information and to also have cost recovery mechanisms in place before a wireless carrier must implement Phase II pursuant to the PSAP's request. Unfortunately, as has been noted this morning, many jurisdictions do not appear to have the funding required to upgrade their PSAP infrastructure so that they are technologically ready to support Phase II implementation. According to the reports submitted to the FCC by the nationwide wireless carriers, Phase II was deployed in 25 States as of the quarter ending this April. The six nationwide carriers have also implemented Phase II E-911 in approximately 400 markets covering approximately 800 unique PSAPs.

Although this is a great development this represents only a fraction of the PSAPs that operate in the country. Multiple wireless carriers are also providing Phase II service to their customers in Metropolitan areas such as Houston, Dallas/Fort Worth, Chicago, East St. Louis, as well as Rhode Island. At least one wireless carrier has deployed Phase II service in cities such as Kansas City, Miami, Richmond, San Antonio, and Indianapolis. Mid-sized car-

riers have also begun deploying Phase II. These carriers have deployed in smaller cities such as Charlotte, North Carolina; Amarillo, Texas; and Bristol, Tennessee, as well as in rural areas of Arkansas, Alabama, Illinois, Kansas, Minnesota, Missouri, North Carolina, South Carolina, Tennessee, and Texas.

Additionally, with respect to location-capable handsets, another part of the technology that needs to be in place, every nationwide carrier using a handset-based approach is offering at least one location-capable handset model in accordance with applicable benchmarks. Last month, for example, Verizon Wireless reported that it is offering its customers ten different GPS-enabled handset models. Sprint PCS is offering 15 location-capable handset models. Sprint also reported that it sold over 8.8 million handsets, GPS-enabled handsets, into the marketplace. Midsize carriers are also offering these location-capable handsets. AllTel, in one case, is currently selling eight models while United States Cellular has five GPS-enabled handsets for sale.

The FCC's role in promoting successful implementation deployment of nationwide wireless E-911 is focused on four distinct areas. First implementation, second enforcement, third investigation of technical and operational challenges, and fourth outreach and coordination. Although we are focused on all four parts, in recent months it has become more apparent that the technical issues no longer represent a major barrier to wireless E-911 implementation. Instead it has become more important that we focus on greater coordination and for establishing greater funding certainty in the implementation of E-911. As a result, the Chairman and the Bureau's focus has increasingly turned to coordination and outreach efforts as essential components as part of FCC's efforts to facilitate E-911 implementation.

Most recently, the Commission embarked on the kick-off meeting of its E-911 Coordination Initiative held on April 29th at the Commission. This widely attended meeting provided us all a foundation for a new era of cooperation among all the entities. It did bring together all parties, including Federal, State, public safety community, and wireless carriers and ILECs to the table. We identified a number of issues that can be addressed on an ongoing coordination. We hope to have another coordination initiative meeting in the fall.

We are also working closely with folks and all the technical scientific groups that are working to get all the hurdles out of the way.

As a final matter, I would like to just emphasize that this E-911 implementation is a very important project for the Commission, and we are focussed on it, and we look to help the subcommittee and its members in any way we can to advance this interest.

Thank you, Mr. Chairman.

[The prepared statement of John B. Muleta follows:]

PREPARED STATEMENT OF JOHN B. MULETA, CHIEF, WIRELESS TELECOMMUNICATIONS BUREAU, FEDERAL COMMUNICATIONS COMMISSION

Good morning, Mr. Chairman and Members of the Subcommittee. I appreciate this opportunity to appear before you on behalf of the Federal Communications Commission (FCC) to discuss our work in support of the deployment of Enhanced 911 (E911) wireless services throughout the United States. This hearing is an im-

portant opportunity to encourage progress in this critical public safety matter, and I commend in particular Representatives Shimkus and Eshoo and the other members of the Congressional E911 Caucus for their leadership in this area.

## I. INTRODUCTION

In recent years, we have seen a heightened sensitivity to the importance of crisis management and an emphasis on improving emergency response systems. The effectiveness of these systems is tied in part to the ability of the public to reach first responders in times of crisis. Whether calling from a regular wireline phone or a mobile phone, Americans today demand assurances from public officials that 911 calls will result in immediate assistance.

Most Americans have long taken it for granted that their 911 phone calls automatically identify their location to emergency call takers. We know all too well that this is not the case in today's world, especially with wireless phones. This mistaken belief of the infallibility of 911 reception and location pinpointing highlights the importance of the speedy deployment of technology to ensure automatic location identification.

Although few Americans even owned mobile phones prior to the last decade, Public Safety Answering Points (PSAPs) now report that they receive 30 to 50 percent of emergency calls from wireless phones. Some PSAPs reportedly receive upwards of 60 or 70 percent of their 911 calls from wireless phones. Unlike wireline phones, where the caller's location is identified through the address associated with the telephone number, mobile phones, present additional technological challenges with respect to automatic location identification.

Ensuring that each American using a wireless phone has enhanced 911 capabilities has been an important goal of the FCC's for at least the past seven years. The Commission developed wireless E911 rules to mandate the development and deployment of wireless 911 automatic location identification technology prior to commercial demand for that product. The FCC's initial decision in 1996 to impose an E911 requirement on mobile wireless carriers was not based on any statutory mandate, nor was it based on any tangible technological showing. Nonetheless the Commission believed such a requirement served the public interest.

Congress confirmed that assessment and added momentum to the Commission's activities with the passage of S. 800, the Wireless Communications and Public Safety Act of 1999. This legislation mandated 911 as the universal number for emergency calls and aided E911 implementation by addressing key issues such as privacy and carrier liability. It also required the FCC to continue coordination efforts in this area, which we have done most recently through the E911 Coordination Initiative.

The Commission launched its E911 Coordination Initiative in response to the need for greater coordination among all stakeholders, including the FCC, wireless carriers, PSAPs, location technology vendors, incumbent local exchange carriers (ILECs), local and state governments, equipment manufacturers, and 911 service providers. The purpose of the Coordination Initiative is to complement current efforts by those parties to speed and rationalize the E911 deployment process, and to ensure that all parties and the public have clear expectations about the roles of the respective parties and their deployment plans. Implementation is an extremely complex process, and the Commission has taken firm steps to require that wireless carriers assume their responsibility in ensuring that the deployment of wireless E911 is not unnecessarily delayed.

It is important to note that not all aspects of E911 deployment are within the Commission's control. For example, financial support and assistance from state and local authorities to provide funding to the PSAPs for their part in this important initiative is also imperative. We know that members of Congress and particularly members of this Subcommittee share the Commission's goal that the entire Nation should have access to wireless E911 services as soon as practicable. We intend to work actively to facilitate E911 deployment as quickly and efficiently as possible.

## II. WIRELESS E911 DEPLOYMENT

The deployment of E911, because of technological and other challenges, was never intended to be a flash-cut process, but a gradual phase-in over several years. The Commission's initial E911 decision in 1996 was based in large part on a consensus agreement developed by the wireless carrier and public safety communities and established two phases of E911 deployment. Phase I requires carriers to deploy a service that provides the telephone number of the 911 caller and the location of the cell site or base station receiving the 911 call. Phase II service requires wireless carriers

to provide precise location information for wireless E911, within certain accuracy parameters.

Despite the challenges inherent in effectuating rollout for between 5,000 and 7,000 diverse PSAPs nationwide, wireless E911 is becoming a reality. Deployment of Phase I service is well under way. Of the Phase I requests received from PSAPs, the six nationwide carriers have, on average, fulfilled approximately 75 percent of these requests. Phase II has required special attention. Because of technological challenges associated with Phase II deployment, the FCC has allowed nationwide wireless carriers to commit to individual compliance plans. Where wireless carriers have violated the terms of their compliance plans, these violations have led to enforcement actions.

The precise rollout of Phase II service, like that of Phase I, depends in large part on when the PSAP makes a request to the wireless carrier for Phase II service. PSAPs must have the ability to upgrade their systems to receive location information and have cost-recovery mechanisms in place before a wireless carrier must implement Phase II pursuant to a PSAP request. Unfortunately, many jurisdictions appear not to have the required funding to upgrade their PSAPs so that they are technologically ready to support Phase II implementation.

Phase II implementation requires wireless carriers to select either a handset-based or network-based solution. Wireless carriers that use network-based solutions must deploy Phase II capability to 50 percent of the PSAP's coverage area or population within six months of a valid request, and to 100 percent of the PSAP's coverage area or population within 18 months of a PSAP request, unless the parties agree upon a different schedule. Wireless carriers choosing a handset-based solution must complete any necessary upgrades to their systems within six months of a PSAP request. Additionally, the rules provide for specific benchmark dates by which these carriers must begin to sell and activate a certain percentage of handsets that provide location information. By December 31, 2005, these carriers must ensure that 95 percent of their customers' handsets are location-capable.

The 2005 date is popularly referred to as the final implementation date of Phase II wireless E911. It is worth noting, however, that the December 31, 2005 date requires only that carriers choosing a handset-based Phase II solution ensure that at least 95 percent of their subscribers have location-capable handsets. By that date, the FCC also anticipates that carriers using network-based solutions will have deployed Phase II at many more PSAPs, but precisely when each PSAP becomes Phase II capable is dependent on the timing of the PSAP request and the PSAP's readiness. As the Commission does not have jurisdiction over PSAPs, there is no corresponding requirement that PSAPs actually be able to receive Phase II data at that time.

According to reports submitted to the FCC by the nationwide wireless carriers, Phase II has been deployed in 25 states, to approximately 400 localities across the country, and more than 800 PSAPs. Multiple wireless carriers are providing Phase II service to their customers in metropolitan areas such as Houston, Dallas/Fort Worth, Chicago, East St. Louis, as well as Rhode Island. At least one wireless carrier has deployed Phase II service in cities such as Kansas City, Miami, Richmond, San Antonio, and Indianapolis. Mid-sized carriers have also begun deploying Phase II. These carriers have deployed in smaller cities such as Charlotte, North Carolina, Amarillo, Texas, and Bristol, Tennessee, and in rural areas of Arkansas, Alabama, Illinois, Kansas, Minnesota, Missouri, North Carolina, South Carolina, Tennessee, and Texas.

Additionally, with respect to location-capable handsets, every nationwide carrier using a handset-based approach is offering at least one location-capable handset model, in accordance with applicable benchmarks. Last month, Verizon Wireless reported that it is offering its customers ten different GPS-enabled handset models, and Sprint PCS is offering fifteen location-capable handset models. Sprint reported that it has sold over 8.8 million GPS-enabled handsets.

### III. FCC ACTIONS PROMOTING CONTINUED E911 DEPLOYMENT

To further promote the successful implementation and deployment of nationwide E911, the FCC has engaged in four major areas of activity: (1) enforcement, (2) implementation, (3) investigation of technical and operational challenges, and (4) outreach and coordination. As discussed below, all four areas are essential to ensure that E911 deployment moves forward as swiftly and effectively as possible.

#### A. *Enforcing FCC Directives*

The FCC has not hesitated to use its enforcement power when wireless carriers are not justified in failing to meet the FCC's requirements. When the FCC reported to the House Telecommunications Subcommittee on the status of E911 in 2001, we

indicated that individual compliance plans for the nationwide carriers were in place. Since that time, the Commission has taken the following actions where carriers have failed to comply with these plans:

- Entered into consent decrees with AT&T Wireless (June 2002) and Cingular Wireless (May 2002) regarding deployment of E911 over their Time-Division Multiple Access (TDMA) Networks, notwithstanding the fact that both carriers plan to phase out much of their TDMA networks as they transition to the Global System for Mobile Communications (GSM) standard. These consent decrees require AT&T Wireless and Cingular Wireless each to make a \$100,000 voluntary contribution to the U.S. Treasury, to deploy E911 Phase II technology at their TDMA cell sites, and to provide Phase II service in response to PSAP requests by specified benchmark dates. The consent decrees also require the carriers to make automatic penalty payments for failure to comply with deployment benchmarks and to submit periodic reports on the status of their compliance efforts. Both carriers have met their benchmarks to date: AT&T Wireless has deployed Phase II technology to over 2,000 cell sites, with nearly 1,200 of those sites currently providing Phase II service, and Cingular has deployed Phase II technology at over 2,400 cell sites, with Phase II operational in nearly 1,700 of those sites.
- After issuing a Notice of Apparent Liability against AT&T Wireless for apparent E911 violations concerning its GSM network, the Commission and AT&T Wireless entered into a consent decree in October 2002 to address these apparent violations. This decree requires AT&T Wireless to make a \$2 million voluntary contribution to the U.S. Treasury, to deploy E911 Phase II technology at its GSM cell sites and provide Phase II service in response to PSAP requests by specified benchmark dates. The consent decree also requires AT&T Wireless to make automatic penalty payments for failure to comply with deployment benchmarks and to submit periodic reports on the status of its compliance efforts. AT&T Wireless has met its benchmarks to date, reporting that it has deployed Phase II technology to 2,000 cell sites on its GSM network.
- In March, the FCC issued a Notice of Apparent Liability against T-Mobile for apparent E911 violations relating to its Phase I deployment, finding T-Mobile apparently liable for a forfeiture in the amount of \$1,250,000.
- Recently, the Enforcement Bureau initiated an investigation into Cingular Wireless's and T-Mobile's deployment of E911 Phase II with respect to their GSM networks and will make a recommendation to the FCC shortly on how to proceed. We hope to have compliance plans and schedules in place soon.

The Commission continues to monitor each carrier's progress in deploying Phase I and Phase II E911 and to investigate alleged failures to meet FCC-mandated benchmarks. Where warranted, the FCC will continue to take quick action to ensure that wireless carriers comply with the FCC's E911 rules and regulations. In other cases where the public interest warrants, we have provided additional flexibility in situations where delayed compliance is beyond the wireless carrier's control. Such cases are carefully scrutinized and reviewed.

It is worth noting that the three wireless carriers deploying GSM networks have experienced difficulties in meeting their benchmarks due to technology problems. The Commission has met repeatedly with these carriers to emphasize the seriousness of the existing benchmarks. Further, these carriers were referred to the FCC's Enforcement Bureau. Within the past several months, all three carriers have announced their decision to switch location technologies to ensure more rapid deployment and improved performance of their E911 systems.

#### *B. Moving Towards Full Implementation*

Although significant progress is being made, we still have a long way to go before wireless E911 is deployed across the Nation. In addition to actively enforcing the existing rules, the FCC is also looking at new ways to help speed and smooth E911 implementation. To this end, over the past year, the FCC has made a number of E911-related rulings, including:

- Setting a deployment schedule for smaller, including many rural, non-nationwide carriers to begin to provide E911 service. Under this schedule, mid-sized carriers were required to begin deployment by March 1, 2003 and small carriers are scheduled to begin deployment this fall. Like the nationwide carriers, mid-sized carriers must report regularly on their E911 deployment progress, and smaller carriers must provide a report outlining their plans for E911 deployment later this summer.
- Clarifying PSAP readiness issues and providing for a certification process for wireless carriers where wireless carriers have completed all necessary steps toward E911 implementation that are not dependent on PSAP readiness.

- Providing guidance on cost recovery issues regarding the demarcation point between PSAPs and carriers.
- Issuing a Further Notice of Proposed Rulemaking seeking public comment on whether and how the 911 and E911 rules should apply to technologies not currently covered by the rules, such as Mobile Satellite Service, telematics services, and emerging voice services and devices; and seeking updated information on issues involved with the delivery of callback and location information on 911 calls from stations served by Multi-Line Telephone Systems, such as PBXs. This item provides an early forum for the possible extension of our 911 and E911 rules.

In other instances, the Commission directly responded to concerns raised by several of the national public safety organizations regarding the unnecessary diversion of PSAP resources to respond to unintentional or harassing 911 calls from wireless phones. In October 2002 and pursuant to a specific public safety request, the Commission issued a public notice clarifying that its 911 call-forwarding rule does not preclude wireless carriers from blocking fraudulent 911 calls from non-service initialized (NSI) phones pursuant to state and local laws. The public notice highlighted the waste of public safety resources that results from fraudulent 911 calls made from NSI handsets, which lack a call back number. The Commission continues to look at the issue of NSI wireless phones through an ongoing proceeding.

In December 2002, the Commission released a Staff Report on unintentional wireless 911 calls, which occur when a consumer accidentally dials 911, often through use of a pre-programmed auto-dial key. The report confirmed that unintentional wireless 911 calls pose a significant problem for PSAPs, and outlined steps that industry participants can and should take to address the problem. For example, the major wireless carriers have requested that their vendors cease shipping phones with an active, auto-dial 911 feature. In nearly all cases, wireless phones distributed by these carriers have not had an auto-dial 911 feature since at least February of 2002. In addition, the Cellular Telecommunications and Internet Association (CTIA) has modified its handset certification program such that certified handsets may not be pre-programmed with an auto-dial 911 feature.

The FCC has also received a commissioned report of an independent expert, Dale Hatfield, which examined the technical and operational issues affecting wireless E911 implementation. Mr. Hatfield, a widely respected telecommunications expert with nearly four decades of experience, met with interested parties to elicit more detailed information regarding E911 deployment issues. In October 2002, he released a report to the Commission containing his findings and recommendations. The Commission sought public comment on the Hatfield Report late last year.

In his report, Mr. Hatfield made a number of findings identifying obstacles to E911 deployment, which include:

- Wireless carrier implementation issues
- ILEC cost recovery and technical issues
- Cost recovery and PSAP funding issues
- Ongoing need for PSAP education, assistance, and outreach
- Lack of comprehensive stakeholder coordination

While the FCC had already become aware of many of the issues raised in the Hatfield Report and was working on potential solutions, the Hatfield Report suggested many novel approaches, which the FCC is actively studying and, in some cases, implementing. For instance, the Commission is taking a greater role in formal coordination through the FCC's E911 Coordination Initiative.

### *C. Overcoming Technical and Operational Challenges*

The Hatfield Report confirmed that ILECs play a critical role in the deployment of wireless E911 service. ILECs generally serve as 911 system operators, providing trunks, facilities, and services necessary to connect wireless carriers and PSAPs. For Phase II, they also provide the Automatic Location Identification (ALI) databases that are used for wireline 911 and must be upgraded to accommodate wireless ALI data. The FCC has sought cooperation from the ILECs to fulfill their E911 implementation role. In response to concerns from both the PSAP and wireless communities, late last summer, the FCC requested additional information from the six major ILECs regarding their role in E911 deployment, including specific information on technical issues and cost recovery plans.

Additionally, Commission staff has been working with state commissions, wireless carriers, PSAPs, and ILECs regarding specific cost issues that have been brought to our attention. In one instance, the Commission staff issued a letter regarding a dispute over responsibility for the costs to upgrade ALI databases for purposes of deploying wireless E911 Phase II service. We fully intend to take action where appropriate to ensure that actual wireless E911 deployment is not delayed because of

perceived regulatory disputes. In an Order released last fall, the Commission similarly expressed concern over the potential for delay due to a lack of cooperation by the ILECs and noted that it would consider enforcement actions or additional regulatory obligations, if necessary.

The Hatfield Report also confirmed that there continue to be E911 implementation issues beyond the Commission's purview. Specifically, we note that PSAP funding continues to be a significant barrier to deployment. Although cost recovery mechanisms are in place in a number of states, these funds have on occasion been diverted for other uses unrelated to E911. If PSAPs do not have funds in place to upgrade their systems, Phase II service will not be implemented in those areas. We know that this issue already has been raised by the Congressional E911 Caucus, and we applaud its efforts to resolve this critical issue. This issue was one of the numerous issues addressed at the E911 Coordination Initiative's April 29 meeting.

Other issues that have been raised with the FCC include E911 compliance following the implementation of Local Number Portability and how to overcome related technical difficulties, and E911 accuracy concerns associated with rural carriers, particularly those with TDMA networks. We are currently evaluating these issues, and hope to have further guidance on these issues later this year.

#### *D. Coordination and Outreach*

Wireless E911 implementation is a highly complex process that requires an enormous amount of coordination. Both coordination and outreach are essential components in the Commission's ongoing effort to facilitate E911 implementation. Most recently, the Commission kicked-off of the E911 Coordination Initiative on April 29, 2003.

This widely attended meeting brought together representatives from the federal government, the public safety community, wireless carriers, ILECs, and other interested stakeholders to share experiences and devise strategies for expediting E911 deployment. All of the Commissioners participated in the event, as did Dale Hatfield, who gave a brief oral report.

The meeting addressed ongoing implementation issues such as PSAP funding, wireless carrier implementation and prioritization, issues relating to LECs, and challenges faced by rural carriers. Panelists shared their success stories on the various topics, in order to inform other similarly situated stakeholders how to overcome deployment obstacles. The stakeholders addressed a number of themes, including:

- Strong leadership and vision is essential to ensure swift E911 deployment
- State or regional E911 points of contact are critical for carriers to ensure swift deployment
- For PSAP readiness, cost recovery and proper management and distribution of funds are key steps toward ensuring wireless E911 rollout

This meeting was the first in a series of more formal coordination efforts to allow the Commission to facilitate E911 deployment. The next meeting of the E911 Coordination Initiative will take place in the fall.

In addition to the Coordination Initiative, both my Bureau and the Consumer & Governmental Affairs Bureau (CGB) have provided ongoing outreach to consumers, public safety, tribal governments and state legislators on E911 issues. CGB staff will be meeting with the National Association of Regulatory Utility Commissioners, the National Congress of American Indians and the National Conference of State Legislators this summer to discuss the FCC's E911 Coordination Initiative and to discuss ways we can work together to speed E911 implementation. To educate the public, CGB recently established a Consumer Alert on unintentional 911 calls and WTB has established a web page focused solely on 911 and E911 issues.

The FCC has also established points of contact designated by the Governors in all 50 states and three of the U.S. territories to work jointly to identify E911 funding and deployment solutions. The FCC expects to hold an E911 roundtable later this year with the Governors' designees as part of an ongoing dialogue to discuss E911 options and identify solutions. Additionally, the FCC intends to engage its Local and State Government Advisory Committee to work on the development of a state-by-state funding and implementation survey. The Commission also will continue working with tribal governments to facilitate the deployment of E911 on tribal lands. Through these cooperative efforts, the FCC seeks to facilitate the expeditious deployment of E911.

We also have been monitoring the E911 coordination efforts of other organizations to enhance stakeholder coordination and applaud the joint efforts of industry and public safety. For example, public safety outreach efforts such as the National Emergency Numbering Association's Strategic Wireless Action Teams Initiative and the Association of Public-Safety Communications Officials' Project Locate have been instrumental in ensuring that local PSAPs are aware of their responsibilities and



assisting with on-the-ground implementation efforts. Additionally, the joint industry and public safety group, Emergency Services Interconnection Forum (ESIF), an arm of the Alliance for Telecommunications Industry Solutions, has worked to develop and refine technical and operational interconnection issues to ensure wireless 911 will be available to everyone.

Earlier this year, ESIF submitted to the Commission a PSAP Readiness Package, which was developed through the joint efforts of wireless carriers, 911 service system providers, and public safety organizations. This serves as a useful tool for PSAPs that are unfamiliar with the E911 request process. The Department of Transportation (DOT) has also established a Wireless E-911 Initiative, which includes efforts to bring national leadership and attention to the E911 issue, to provide technical assistance and guidance and training to accelerate PSAP readiness, and to engage the Nation's leading information technology experts in a reexamination of the technological approach to E911. FCC and DOT staffs have been actively involved in coordination; FCC staff has attended DOT's Wireless E-911 Initiative Steering Council meetings and DOT in turn participated in the FCC's Coordination Initiative meeting. Most recently, DOT issued a Wireless E911 Initiative Priority Action Plan outlining six urgent priorities to E911 deployment, and I commend the DOT for its efforts.

#### IV. CONCLUSION

Wireless communications have become increasingly important to our national communications infrastructure and in our everyday lives. The United States is the only nation in the world that has required that all wireless calls have E911 capability to assist the public safety community in performing their vital work. All the stakeholders who have worked on this process—Congress, the public safety community, wireless carriers, ILECs, state and local governments, equipment vendors, technology vendors, and the Commission—should be proud of this accomplishment. These very same stakeholders must continue to be diligent in completing the availability of Nationwide E911 in the near future.

For its part, the Commission continues to make wireless E911 deployment one of its highest priorities. We have come a long way, and through some difficult times, but we are optimistic about the future of wireless E911. We appreciate Congress's efforts, and in particular, the efforts of members of this Subcommittee, to keep this issue in the forefront. We plan to continue our efforts on various fronts, but especially, the E911 Coordination Initiative, to ensure that E911 deployment continues apace.

I would like to thank the Subcommittee for this opportunity to provide information on wireless E911. I look forward to hearing your views and answering any questions you may have.

Mr. UPTON. Thank you again for your leadership on that issue.  
Mr. Melcher.

#### STATEMENT OF JOHN MELCHER

Mr. MELCHER. Good morning, Mr. Chairman. I would like to join my colleagues on the panel in applauding your efforts and especially in holding this hearing, but even more so for your leadership and getting involved in what traditionally and historically has been a local effort which brings us to why we are here today. Because of the local nature of 911 as it grew up, there has been such a disparity in the way 911 systems are built and in place around the country today. And 911 is no longer a local phenomena. It is now a global phenomena, and that is why this kind of hearing is very, very important that we bring the educational aspects of what the intricacies are to light. On September 11th, as you well remember, that fateful morning when we were holding the Report Card to the Nation Press Conference that NENA was hosting, and as I was introducing all of you to give comments and make remarks about the data that we had uncovered, and that our lives changed significantly and forever, I am particularly struck by some of the same faces that have been involved for so many years on this issue, and

I think the incredible amount of success that we have had so far is worthy of applause, but we also have so many challenges. I would like to speak to a few of those.

Our 911 systems are truly the Nation's first responders' first responder, if you will, and they have to be robust enough to face the challenge. NENA recently signed a memorandum of understanding with NORAD because it occurred to them that not all threats may appear on their radar screens. The airborne threat may actually be reported by a citizen who sees the cruise missile coming across the beach and would whip out their cell phone and dial 911 because that's the number they know in times of crisis. So our scope has changed significantly.

It is not just that our job has gotten more difficult. It is also a little bit more complex, but the team that you see in front of you, and I think this is an incredibly well-put-together panel because it represents the true stakeholders that are involved in making wireless E-911 and future technologies in 911 a reality.

The PSAP readiness issue has been brought up so many times, and the funding has been talked about and spoken to by almost every member this morning. Some of the panel members will speak to that, but you should know that PSAP readiness has been a little bit of a situation that has morphed and changed over the last few years. Many States have been putting aside money to pay for wireless Phase II and building up that savings account and only recently, and I mean NENA in the last few months, have all of the incumbent local exchange carriers gotten their tariffs actually out and settled in some capacity so that local PSAPs could start buying the services.

So as the funds were being built up, there were truly things that were happening to make this a reality. Unfortunately, due to economic times a large balance sitting there in some States was just too much temptation for the local legislators, State legislators, and those funds have now disappeared. So now that the tariffs are in place, technologies in place, everything's ready to go, now the money is gone, and so that is a huge problem, and it gets a lot into States' rights. So I think it shows a lot of courage on your part to try to address these very sensitive issues.

I think what is important, from a NENA perspective, in public safety is to let you know what we are doing about it. NENA formed the strategic wireless action team, the SWAT team that you heard referenced here this morning, to bring all of the stakeholders together in probably the most comprehensive effort to date. We applaud CTIA for doing this back in 1995 and 1996, and we have found need to get back together again. We have got all the wireless carriers, major carriers and some of the rural carriers involved. We have all the major local exchange carriers, incumbents. Obviously the FCC is a stakeholder in this, as well as the public safety folks and the State legislative groups, and Governors' association and all kinds of people that have gotten together on this, but it is about telecommunications and public safety. This is as much as a Homeland Security cast can be compared to this. It is really a telecom/public safety issue.

So we had to come together to figure out what we could do about it and what answers we could bring back. There are some things

we can do on our own with outside assistance not necessary. There are some things we are going to require outside assistance. And that report, that consensus document that we are working so hard to obtain closure on, will be back in front of you folks in the fall of this year. We are shooting for an October timeframe to present it back to you after the recess. So that is going to give some recommendations, tell you what we can do without help. But we are also going to require some help, and I think funding is going to be part of the Federal Government's role.

Mr. Hatfield talked about the technology and the infrastructure. We are in an antiquated infrastructure environment. I will draw just a minor contrast. AT&T Long Distance Network today, that processes long distance calls, we are told does so with about 85 to 90 switches. They are called long distance tandems.

In the 911 world, we have tandems as well. They are called selective routing tandems. Throughout the Nation there are almost 800 of these selective routing tandems. That number is growing. It shouldn't be growing. It should be reduced. The contrast is that each and every one of those 800 some switches don't talk to each other. Where in the AT&T long distance environment, they all talk to each other, and if one fails, they all back each other up. Ours are sitting out there as isolated entities that do not have redundancy, robustness and true integration. There are some mated tandems, but that is not true interoperability, and that is 800 units of cost to the local exchange carriers, which is passed on to the local public safety folks that could be reduced significantly. So we are very concerned about that.

I do have two pieces of survey data that I wanted to share with you this morning and you see the posters up there now. With our engagement of the monitor group and the SWAT initiative, we did a poll, and we found that nearly 60 percent of the Americans, if you notice the one in red on top, feel that the focus on homeland security has increased the importance of 911 emergency number services, especially wireless. And if you will notice all respondents, and we break them down to wireless subscribers and those who previously called 911, the statistical difference is negligible and everybody is feeling that this is a priority.

The second piece of information we thought was incredibly significant that you really needed to see this morning was upon hearing a description of how wireless 911, and remember we had to describe this to a lot of people because William Shatner had them convinced when you dial the magic three digits things happen automatically, but once they understood, the respondents indicated that they believed improving the technology was very, very important and of great importance, and if you will notice, the majority of them thought it was of great importance with the remainder of them, almost a 100 percent, thinking it was at least fairly important. So I think your efforts this morning are truly reflected in the community's view and our Nation's view as to how important this stuff really is.

We have got to address things like staffing and training. That's very important. We have got to address future proofing and make sure that we are not going to have the next technologies that Mr. Hatfield talk about, the personal safety devices, the automatic

crash notification—we have got that up and running in Houston. Those types of technologies have got to be addressed aforethought and not as an after thought. We don't want to go back here in front of you 2 years from now trying to address a different question as to why telematics or some other device wasn't integrated into the system.

And last, it is working through our constituents and our colleagues. The U.S. Department of Transportation and their Safety Initiative, the Secretary has been very active in 911 issues. There are appropriations bills coming up that are going to be potential sources of funding we hope that you will look at. But the final thought that I would like to leave you with is that the teamwork involved is the most important thing. The people that you see represented in front of you and some others are the ones that are going to make it happen. We are the ones that do this for a living, and it has got to be a true team effort. It takes everybody involved, and it has got to be about what they can do, not what they can't do.

[The prepared statement of John Melcher follows:]

PREPARED STATEMENT OF JOHN MELCHER, PRESIDENT, NATIONAL EMERGENCY  
NUMBER ASSOCIATION

Mr. Chairman, members of the Committee, Congressman Upton, thank you very much for providing me with this opportunity to appear before you today. My name is John Melcher, and I serve as the President of the National Emergency Number Association (NENA) and Deputy Executive Director of the Greater Harris County, Texas 9-1-1 District.

It gives me great pleasure to appear before the Subcommittee today. Three months ago I had the honor of testifying before the Senate Committee on Commerce, Science, and Transportation Subcommittee on Communications. That day, like today, was an opportunity for those of us on the frontlines of 9-1-1 to update the Congress on our progress and activity to deploy wireless E9-1-1. We appreciate your keen interest and great willingness to help make America and its residents and visitors safer.

In that spirit Mr. Chairman, I would like to acknowledge and thank you and a few of your colleagues for their dedicated leadership to improve our nation's 9-1-1 systems.

First, Mr. Chairman, I would like to recognize two of the founding Members of the Congressional E9-1-1 Caucus, Congressman John Shimkus and Congresswoman, Ann Eshoo. Both have demonstrated a strong commitment to advancing the goals of public safety and the importance of 9-1-1 in every device, everywhere. I thank them for their leadership and tireless advocacy.

I would also like to acknowledge Congressman Gene Green, a great Texan and strong advocate on these issues before your Committee. Congressman's Green dedication goes beyond Washington, as he has been a great friend to the Greater Harris County 9-1-1 District for many years. I would add that many of our advancements in Greater Harris County would not be possible without the likes of Gene Green.

And finally, Mr. Chairman I would like to acknowledge you and your staff for the work all of you do each and everyday to better understand and advance these issues. Just a couple of weeks ago, I found myself in your home state, at the Michigan National Emergency Number Association state chapter conference. The conference, which is similar to conferences that occur in almost every state in the Union, brings together local and state 9-1-1 officials to learn, listen and interact with national experts. I was delighted to see that one such expert, Mr. Will Norwind, came from your staff. Upon further inquiry, I found out that you had attended the conference the year before, visiting a local PSAP, riding along on an emergency call and seeing first hand the challenges we face in wireless and wireline 9-1-1.

I applaud your leadership and commitment to further educate your staff and yourself about the issues E9-1-1 presents us all. In these many efforts, you have been a passionate supporter of technology, communications, first responders and 9-1-1. I

extend my personal gratitude and the thanks of the 9-1-1 industry and nation for your work and dedication.

We encourage your colleagues in the Committee to follow your lead and work closely with the 9-1-1 community, scheduling visits to local PSAPs and your state NENA chapters to keep current on the issues facing us all, and the many opportunities to improve our citizen-activated emergency response capabilities.

#### PROGRESS

We are delighted to see the participation of Mr. Dale Hatfield at today's hearing. As an independent expert, Mr. Hatfield was able to identify some of the myriad of technical and operational challenges impeding progress. His evaluation, submitted to the FCC last fall and commonly referred to as the "Hatfield Report," has proven to be an important roadmap to progress in wireless E9-1-1 and a prescription for improving the dialogue among all parties.

The FCC's E9-1-1 Coordination Initiative, on April 29, provided additional illustration of the need for all of us to come together to better understand what can be achieved in E9-1-1 implementation.

This activity is both consistent and vital to serving the goals and objectives of the Wireless Communications Public Safety Communications Act of 1999, an important foundation for improving emergency communications, and specifically for deploying wireless E9-1-1.

In the short time between the Senate and House hearing, our nation has defeated a tyrannical dictator, raised Homeland Security threat levels several times, and unfortunately experienced several 9-1-1 failure-related tragedies, demonstrating further the need for a dependable E9-1-1 phone system.

Three months ago, in my testimony before the Senate, I stated my organization's focus on solutions, progress and implementation. I added that, to the extent that barriers exist, we must work together in a committed and coordinated way to overcome them. I brought forward NENA's most recent effort to keep all the parties at the table, to address specific institutional barriers, challenges in technology, PSAP readiness and the funding of our nation's 9-1-1 system. At that time, I shared the first "chapter" of the NENA Strategic Wireless Action Team (SWAT) process, to examine and address the global and systemic challenges affecting E9-1-1 implementation.

Understanding that we as a nation and community are still at a crossroads of implementation, NENA has convened national leaders and technical and operational experts to identify priorities, and determine the systemic changes needed to improve our nation's 9-1-1 system. Specifically, we are bringing together all the relevant constituents—wireless and wireline telecommunications companies, state and local organizations, and the nations leading Public Safety groups: NENA, APCO and NASNA—in a cooperative effort to address—and resolve—the critical barriers to ubiquitous E9-1-1 implementation.

Focused on solutions and results-based outcomes, SWAT is interjecting new dialogue, energy, and resources where others have become exhausted. Moreover, SWAT is recognizing the necessity for a comprehensive public/private cooperative effort to address the many issues that are affecting the 9-1-1 system—one dealing with solutions, not barriers and contention.

While the nation's 9-1-1 service providers struggle with deploying location technology for wireless telephone sets, nearly 400 counties do not even have basic 9-1-1. SWAT recognizes the disparity and diversity our nation's emergency response capabilities and is working with individuals as well as communities to address the most basic to the most complex requests.

As segments of our nation rely more on two-way messaging devices, automatic crash notification services, etc., NENA SWAT recognizes that the 9-1-1 system must be modernized to accommodate emerging technologies and interconnected to accommodate the transfer of digital information across the country. More than anything, SWAT is an approach to resolve the coordination and funding issues systemically by increasing the alignment of all critical stakeholders involved in deploying E9-1-1.

SWAT is our opportunity to do it right. (1) Organize leaders on a national level, (2) get the right experts in a room apply appropriate resources and guidance and (3) identify technologies, tools, and expertise needed to assure the consistent delivery of 911 systems throughout the U.S. SWAT is designed to look at the components of wireless E9-1-1, along with the environment in which it operates, and identify and deploy the kind of focused resources necessary to truly foster wireless deployment. It's about getting the right people, the right information to solve wireless E9-1-1 problems.

## STAKEHOLDERS INITIATIVE

Building from the findings of Dale Hatfield in his FCC-commissioned report on E9-1-1, NENA SWAT recognized a need to bring all parties together in a special undertaking to examine the possibility for a new consensus, the *E9-1-1 Stakeholders' Initiative*. This initiative joins all the relevant stakeholders—including the front-line companies in the wireless and wireline telecommunications industry, and the relevant state and local bodies and organizations—in a cooperative effort to address and resolve the critical issues facing E9-1-1 deployment. In the interest of third party objectivity, this effort is being organized and facilitated with support from the Monitor Group, a preeminent management consultant firm, and the PSAP Readiness Fund.

Next week, on June 12th here in Washington, public safety advocates and leaders will join with representatives of wireline E9-1-1 system service providers and wireless companies in a “Call to Action,” a press briefing affirming the need for this collaborative process, to keep all parties at the table, in an open dialogue, and to truly make our nation’s 9-1-1 system a top public policy priority.

A key area of progress thus far, is the establishment of a platform for exploring consensus. Through ongoing dialogue, countless interviews and serious debate we have identified a wide range of potential options and solutions to improve deployment. In March 2003 and again in May 2003, we held “Constituent Roundtables”—meetings of the executive leadership of the SWAT Stakeholders Initiative constituents—to discuss the most contentious and complex issues involved with potential solutions. At these Roundtables, several important areas of consensus have begun to emerge, allowing us to focus on several key areas of ongoing debate.

The first complex challenge is the lack of coordinated resources, funding and incentives shared among all the fragmented stakeholders in the E9-1-1 equation. The second challenge is pure diversity. Our nation’s 5,300 PSAPs are highly decentralized, while our nation’s telecommunications providers are increasingly national. This makes cost models difficult to construct. Consistent follow-through between parties has become a challenge in itself. Third, but not least, it comes down to pure political will. In communities where there is strong political will around E9-1-1 issues and the deployment of location based services we see more favorable results.

In fact, some of the survey results from the Stakeholders Initiative suggest that the people may be ahead of their local and state elected and appointed officials in recognizing the importance of identifying and locating emergency callers. For example, nearly 60 percent of Americans feel that the focus on homeland security has increased the importance of 9-1-1. Upon hearing a description of enhanced 9-1-1 for wireless callers, 99 percent said it was important that this technology be provided as rapidly as possible. In other words, that’s *unanimous* public support for this vital public safety and anti-terrorism measure. The majority of survey respondents (59%) rate 9-1-1 as “Much or somewhat more important” than other public safety priorities such as “more police and fire patrols,” or more “training for police” or more “police and fire equipment.” The American public also views 9-1-1 issues as at least as important as a number of other policy issues, including education (59% say 9-1-1 is more important), universal health insurance (65%), highway maintenance (75%), and homeland security (75%). And the vast majority of the surveyed public is willing to pay for it, quoting acceptable consumer user costs for improving their ability to call for help, and improve the safety and security of all Americans.

## REMAINING HURDLES

*Making 9-1-1 one of our nation’s top public policy priorities is responsible policy for today and tomorrow.*

While there is increased public and government awareness for the need to accelerate the deployment of E9-1-1, ubiquitous E9-1-1 service unfortunately remains elusive. Large hurdles need to be overcome in addressing “PSAP readiness,” funding and resources of our nation’s E9-1-1 system, and the ability to plan for the future.

One of the hurdles most often cited by wireless carriers is the issue of “PSAP readiness” and the FCC-mandated implementation deadlines that affect the timing and pace of deployment. In fact, some of my colleagues in the wireless industry have made comments and observations that their industry will be ready to deliver E9-1-1 well before the entire public safety community will be ready to receive this information.

While it’s true that there are PSAPs that are not “ready,” and some may take a long time to become “ready,” there are a growing number that are prepared. It should also be emphasized that PSAP readiness is not just a direct PSAP concern. E9-1-1 implementation depends upon the timely and coordinated production and availability of Phase II capable handsets, other location technology, appropriate net-

work infrastructure upgrades, PSAP support technologies and other technical enhancements.

Product development and infrastructure upgrades presumably depend upon timely orders from customers, as well as the willingness and understanding of the supplier of what is expected and what is needed in project management expertise. In the interest of emergency services for wireless customers and the public in general, best efforts by all parties should always be the expectation. Sadly this is often not the case, and in some instances we are confronted with a conspicuous absence of engagement.

Ultimately wireless 9-1-1 calls must be routed to a PSAP on the network infrastructure of a landline telephone company. This "9-1-1 System Service Provider" is usually an incumbent local exchange telephone company (ILEC). A critical stakeholder in the process, ILEC's have been for the most part absent from both the original planning and FCC rule making on this subject. Subsequent regulatory actions have considered the ILEC simply a vendor to the PSAP, in spite of their central position in the interconnection/interface complexities uniquely generated in wireless E9-1-1. This is untenable for the public safety community. That is why our Stakeholder Dialogue and the NENA SWAT project have given ILECs an important seat at the table.

In this environment, PSAP readiness is more of an issue of leadership with equal recognition of diversity of PSAPs. It requires productive, timely and efficient relationships between the wireless carrier, ILEC and PSAP, along with other vendors and decision makers. Constant communication among the parties, project management, and forecasting of needs are critical. Landline trunking must be ordered and provisioned, technical interface issues addressed, and overlapping database functions coordinated. Much of this must occur within a diverse and complicated regulatory environment at the federal and state levels. And it needs to be paid for. If all of this doesn't work well, the pace of deployment can be materially impacted.

Without a doubt, it's easy to point fingers and lay blame, but all parties can and should agree that PSAP readiness is an issue that reaches beyond the bricks and mortar of the PSAP. It's a systemic issue for all parties to address in a sense of common purpose, the public interest, frequent communications and cooperative spirit.

*PSAP readiness is about keeping all the parties at the table, communicating on a regular basis, so that we can better address and prepare for challenges as they arise, not as they pass us by.*

#### RESOURCES AND FUNDING

Closely linked to the issues of technology and PSAP readiness is the availability of sustained resources and funding to deploy wireless E9-1-1.

FCC Docket 94-102, requires that wireless carriers provide location information from wireless phones by December 31, 2005 in any case where a valid PSAP request has been received. In order to do such, many PSAPs require sustained resources to be able to first accept, and then process Automatic Number Identification and Automatic Location Information (ANI/ALI) from wireless phones, through upgrades of technology and recovery of basic costs. Unfortunately, in far too many of our nation's communities, these E9-1-1 needs are not being met simply because 9-1-1 funds and resources are not being allocated for 9-1-1 use.

The costs of maintaining and operating a 9-1-1 system are significant and necessary. Technical, operational and financial resources are required from both the public and private sector. Reliability, redundancy, innovations and challenges in modern communications are constantly re-defining 9-1-1 costs and economies of scale.

Training of dispatchers and turnover of highly skilled employees remains a challenge and obstacle for most PSAPs. Tight budgets and scarce resources makes it that much more difficult to retain highly skilled employees. New technologies require more focus on education and training, while simultaneously creating a more skilled work force that requires additional resources for wages, training and employee retention. Dispatchers and call takers are dedicated public servants, but they need resources and skills to appropriately answer the call for help.

In the days of the Bell monopoly many of these costs were included in a consumer's basic service. Early 9-1-1 cost recovery mechanisms relied on costs being passed directly to the consumer in the form of surcharges and fees on phone bills. Understanding that 9-1-1 is a benefit to the public as a whole, these fees and surcharges were to be used for direct 9-1-1 expenditures for both the public and private sector. As new communications technologies emerged, such as mobile telephony,

similar surcharges were adopted for wireless phone bills. However, these new surcharges, implemented for wireless E9-1-1, haven't always stayed with 9-1-1.

Boosting revenues for strained government budgets and programs, 9-1-1 funding has become an easy target. Subsequently, without appropriate funding and resources our 9-1-1 systems become antiquated, obsolete and unable to handle new communications technologies being used by the public. This results in missed deadlines, under-funded systems or no deployments at all.

While I'm not questioning the right of state policy makers to make critical public policy decisions regarding their budgetary needs, this alarming trend is, at best, slowing our progress towards truly universal 9-1-1 service, and, at worst, outright endangering its implementation. While the nature of emergency services will always be local, the access to those services is a national expectation. This expectation and need was acknowledged in the Wireless Communications and Public Safety Act of 1999.

*We would ask the Members of Congress to do everything in their collective and individual power to protect and support 9-1-1 monies for 9-1-1 purposes. This is a principle and policy agenda that federal, state and local governments can and should all agree on.*

#### FUTURE PATH PLANNING

Our collective job today is also about planning for our future. While this hearing specifically speaks to wireless E9-1-1 implementation and progress, I can not over-emphasize the importance of future proofing our nation's 9-1-1 infrastructure. I say this with a word of caution and concern, because if we don't, we'll be back here year after year, dealing with the challenges of new and emerging forms of communications.

Earlier this year, the FCC sought comment on a notice of proposed rulemaking, asking whether its regulations on access to emergency service communications networks and systems should be expanded to address a variety of other devices and services, including mobile satellite service ("MSS"), telematics (in-vehicle) services, multi-line telephone systems ("MLTS"), resold cellular and PCS services; pre-paid calling services; "disposable" phones; automated maritime telecommunications systems ("AMTS"); and "emerging voice services and devices." This is an important and necessary first step. Much more will need to be done.

Preparing for our next challenge, NENA's Future Path Plan is integrating the growing variety of non-traditional ways to access 9-1-1 by adding components and functions to the overall 9-1-1 system to ensure that new methods are more effective, more dependable, and/or more economical than what we have, or than other alternatives. This technical plan for future 9-1-1 systems is providing a long-term direction for development to support new call sources and needs. VoIP is already here. Who knows what the future will bring.

#### FINAL THOUGHTS

The deployment of E9-1-1 services, coupled with new technologies, has dramatically improved personal safety and security and given new promise to what is possible. What was once a dream is now a reality in 643 jurisdictions nation wide.

In these jurisdictions, wireless 9-1-1 callers are being located, new technologies are being introduced, lives and resources are being saved.

Earlier this week, NENA sent individual wireless E9-1-1 state deployment profiles to each committee member. The profiles, which have been made possible by the United States Department of Transportation (USDOT)/NENA Wireless Implementation Program; as we are presently surveying State and County 9-1-1 coordinators to provide national information on readiness of states, counties and PSAPs for wireless E9-1-1. I would In the coming weeks, as you and your colleagues return home for recess, I would ask that you review the status of E9-1-1 implementation in your state, share the information with your colleagues, local leaders and constituents. [This information can be found on the NENA website at the following: <http://dot.nena.org/>]

*The 9-1-1 Call to Action is simple, help us make wireless E9-1-1 a top public policy priority in your community, state and our nation.*

Mr. UPTON. Thank you very much.

Mr. Korsmo.



**STATEMENT OF KARL KORSMO**

Mr. KORSMO. Good morning and thank you, Mr. Chairman, for inviting AT&T Wireless to share our E-911 implementation experience with you.

I am Karl Korsmo, Vice President of External Affairs, and I am responsible for E-911 in our company. AT&T has approximately 22 million customers in the United States. We are using a network-based E-911 solution for our TDMA or second generation network to provide Phase II location for E-911 calls. This TDMA network today provides service to the majority of our customers. In the third quarter of 2002, we decided to deploy that same network-based solution to our new GSM network. Network-based location systems use equipment installed in our wireless cell sites to locate callers rather than GPS receivers and phones. As a result, our wireless customers will not need to purchase new handsets to take advantage of Phase II E-911 when it becomes available in their area.

AT&T Wireless and our partners in public safety are making great strides in deployment of wireless E-911 service, first on our TDMA network. We have hundreds of PSAPs with Phase II deployed and having service today on our network, hundreds, and more every day. We have Phase II service active with PSAPs in over 20 States today. We are meeting our milestones that we have committed to the FCC. By the end of June, we will have over 4,000 of our TDMA cell sites providing Phase II location to PSAPs. Locally, here in the Washington, DC area, we have integrated our Phase II service with PSAPs in Louden, Arlington, Prince William, and Stafford counties and Alexandria, Virginia, and in Fairfax County, Virginia. And in Ann Arundel County, we have installed the Phase II equipment and are ready to hook it up to the PSAPs. On our new GSM network, we have been deploying GSM capable location equipment in our cell sites for the past 5 months, as soon as it was available from our vendor. We have equipped well over 3,000 GSM cell sites already with this equipment, and in this, we are also meeting the FCC milestones that we have committed to. We have completed testing on GSM in our Nokia infrastructure. We have integrated that GSM today with the PSAP in Fort Myers, Florida, and we have begun rolling out on our Nokia infrastructure GSM Phase II on those thousands of pre-equipped cell sites. We are still working to complete the testing on the rest of our GSM non-Nokia systems, and we expect that testing to be completed shortly.

Vendor delays have severely compressed our schedule for meeting our next FCC milestone, but let me stress to you AT&T wireless has done everything possible and continues to do everything possible to speed the delivery of Phase II on GSM. We have GSM integrations with PSAPs scheduled in six States for this month and in 12 States, an additional 12 States for the next month.

I wanted to share today three lessons learned by AT&T Wireless in deployment of AT&T's Phase II service. First, we and our vendors are getting very experienced at deploying Phase II. On TDMA, the speed of our network design and installation has been improving so that the critical path issues on Phase II deployment are not usually the wireless technology but rather procedural and coordination issues such as getting trunk orders processed by local ex-

change carriers, end-to-end integration testing, and obtaining permits for new antennas.

Second, we find that State and regional leadership by public safety officials speeds Phase II deployment significantly. Kansas City is a good example. The Metropolitan Area Regional Council or MARC prepared for this for a long time, and when we were ready to hook up our Phase II system in Kansas City, MARC officials had over 30 PSAPs scheduled and ready. Likewise in Indiana, State leadership by both elected and public safety officials provided key leadership in education and funding. Other States such as Texas, North Carolina, California, Tennessee, New Jersey, Minnesota, and Illinois are examples of widespread Phase II implementation today due to foresight by State public safety leaders.

I am going to skip to my conclusion. Finally, carriers and public safety together should do more to make deployments more efficient. Having done hundreds of successful Phase II deployments today, carriers and public safety officials should do more to apply our learning to the benefit of the remaining areas of the country. However, we organize it through the NENA SWAT process that John mentioned or State by State. I know from experience that Phase II implementation will become more efficient as our cooperative efforts increase.

Thank you, Mr. Chairman.

[The prepared statement of Karl Korsmo follows:]

PREPARED STATEMENT OF KARL KORSMO, VICE PRESIDENT OF EXTERNAL AFFAIRS,  
AT&T WIRELESS

#### INTRODUCTION

Good morning and thank you Mr. Chairman for inviting AT&T Wireless to share our E911 implementation experience.

AT&T Wireless is the largest independent wireless provider in the U.S. with approximately 22 million customers. AT&T Wireless is using a network-based E911 solution in our TDMA second generation network to provide Phase 2 location of calls to 9-1-1. This network today provides service to the majority of our customers. In the third quarter of 2002 we decided to deploy that same network-based solution in our new GSM network. Network-based location systems use equipment installed in wireless cell sites, rather than GPS receivers in phones, to estimate the latitude and longitude of a caller. As a result, AT&T Wireless customers will not need to purchase new handsets to take advantage of Phase 2 E911 when it becomes available in their area.

#### MAKING PROGRESS

AT&T Wireless and our partners in Public Safety are making great strides in deployment of wireless E911 service. First, on our TDMA network, over 1,300 requesting PSAPs receive Phase 1 service today, which includes the caller's phone number and location of the serving cell site. Approximately 340 of these PSAPs also requested and receive Phase 2 service, which provides a more precise estimate of the caller's location. We have dozens of requesting PSAPs in various stages of deployment, and we are integrating Phase 2 service with additional PSAPs nearly every week.

We have Phase 2 service now in 20 states, with service in more states scheduled in the next several months. By the end of June, we will have over 4,000 TDMA cell sites providing Phase 2 location to PSAPs. Locally, we have integrated our Phase 2 service with PSAPs in Loudon, Arlington, Prince William and Stafford Counties and Alexandria, Virginia. In Fairfax County, Virginia and Anne Arundel County, Maryland, we have installed Phase 2 equipment and are ready for integration.

On our new GSM network, we have been deploying GSM capable locations equipment in our cell sites for the past five months, as soon as it was available from our vendor. We have equipped well over 3000 GSM cell sites already. We have been testing since early March in two markets—Ft. Myers, FL on a Nokia GSM network

and York County, PA on an Ericsson GSM network. Pre-deployment testing on the Nokia network completed last week, and GSM Phase 2 is now integrated with the PSAP in Ft. Myers. We expect our vendor to complete shortly the final pre-deployment validation on one remaining component still under test in York County. We have begun rolling out GSM Phase 2 service on our Nokia GSM systems as rapidly as possible, to those thousands of pre-equipped cell sites.

Vendor delays can sometimes challenge our short term progress on the milestones we committed to—this week, for instance, we will be providing the FCC with information on vendor delays in finalizing the operational software for GSM Phase 2 systems—but let me stress that AT&T Wireless has done everything possible, and will continue to do everything possible, to speed the delivery of Phase 2 on GSM. Though our schedule for PSAP integration is now severely compressed, we are working diligently with our vendor to solve remaining deployment and technical hurdles, and to stage our resources across the county to catch up on GSM as quickly as possible. We have GSM Phase 2 integration scheduled this month in 6 states with our partners in Public Safety, and in 12 additional states next month.

#### LESSONS LEARNED

I have three “lessons learned” to share with you, from our experience to date.

First, AT&T Wireless and our vendors are getting very experienced at deploying Phase 2 systems. On TDMA, the speed of our network design and installation has been improving, so that the “critical path” issues are usually not the wireless location technology, but rather procedural and coordination issues—such as getting trunk orders processed by local exchange carriers, end-to-end integration testing, and obtaining permits for new antennas. Likewise on GSM, as our vendor breaks through the final technical barriers, procedural and coordination issues will become the critical path to deployment.

Second, we find that state and regional leadership by Public Safety officials speeds Phase 2 deployment significantly. Kansas City is a good example. The Metropolitan Area Regional Council (MARC) prepared for a long time, and when we were ready to hook up and test our Phase 2 system, MARC officials had over 30 PSAPs scheduled and ready. Likewise, in Indiana, state leadership—in this case by both elected officials and Public Safety—provided key leadership in education and funding. Other states, such as Texas, North Carolina, California, Tennessee, New Jersey, Minnesota and Illinois are examples of widespread Phase 2 implementation, due to the foresight of state Public Safety leaders in education, planning, coordination and fiscal management. State and regional leadership have made a big difference.

Third, AT&T Wireless has seen significant progress result from the collaborative dialogue on technical issues sponsored by the Emergency Services Interconnection Forum’s (ESIF). This is a neutral forum for industry and Public Safety experts to discuss solutions to technical issues. Though active for only a year or so, ESIF has already been a great help to Wireless E911 deployment efforts.

#### CONCLUSION

Finally, carriers & public safety together should do more to make deployments more efficient. Having done hundreds of successful Phase 2 implementations, carriers and public safety should do more to apply our learning to the benefit of the remaining areas of the country. AT&T Wireless pledges the deployment experience of our engineers and technicians, and that of our vendors, to work with Public Safety experts in the states, and with national NENA & APCO experts, to establish pre-deployment teams. These pre-deployment teams could transfer knowledge, lessons learned and best practices to Public Safety agencies interested in having Wireless E911 service. We are ready to begin now to establish these teams. Perhaps we could have one pre-deployment team per state. However we organize it, through the NENA SWAT process or state-by-state, I know from experience that Phase 2 implementation will become more efficient as our collective efforts increase.

Thank you for giving me the opportunity to share our experience with the Committee this morning and I look forward to answering any questions you may have for me.

Mr. UPTON. Thank you very much.  
Mr. Callahan.

#### STATEMENT OF JAMES CALLAHAN

Mr. CALLAHAN. Thank you. Good morning.

My name is James Callahan. I am the President and Chief Operating Officer of MobileTel, headquartered in Larose, Louisiana. MobileTel provides wireless service to Lafourche and Terrebonne Parishes, which comprises roughly 3,300 square miles of mostly sparsely populated rural territory, located in Louisiana's Third Congressional District. I would also note that MobileTel was the first carrier in its market to deploy Phase I, ahead of all the national major carriers.

I am honored to testify on behalf of MobileTel and also to represent the nearly 100 member companies that comprise Rural Cellular Association. RCA member companies provide services in more than 135 rural and small metropolitan markets where approximately 14.6 million people reside. For those of you unfamiliar with MobileTel, our service area is distinctly rural. Our subscribers in the general public benefit from our commitment to maintain a network that maximizes coverage in areas deemed commercially unattractive by other wireless service providers. It is important for Congress to hear directly from small rural carriers about an issue that has such implications for the future of public safety and wireless service delivery in rural America.

The FCC's Phase II E-911 requirements have put many small carriers like MobileTel at a critical crossroads. In talking today about the challenges that face MobileTel and other small rural companies, the FCC's mandate, the theme you will hear is simple, but critical. Current FCC requirements are shaking the very foundation of our businesses in rural America. Many small carriers are now being forced to make choices that could mean their geographic areas will not expand to serve areas still unserved, and more importantly, in fact, service areas may well shrink, creating an even greater void in wireless service delivery in rural America. We are deeply concerned that already underserved consumers will lose out because of FCC policies that reflect little understanding of rural America.

MobileTel recognizes and fully supports the public safety goals of the FCC's E-911 mandates. Safety concerns have always played a large part in MobileTel's network decisions. Like our relationship with our customers, MobileTel's relationship with the public safety community is local, direct and open. Small rural wireless carriers have been and are still working very hard in communities across this Nation to successfully overcome Phase II hurdles. These hurdles include geography which is unique to America, technological limitations, and the lack of adequate cost recovery for small rural wireless carriers. The technical and resource challenges of delivering Phase II services to rural America are so significant that the compliance is having a major impact on our viability and jeopardizes the ability of wireless services, including basic 911 service, in many rural parts of this country. The FCC's mandates and schedule for compliance should be adjusted to fit the realities of the rural marketplace. If the Commission is unwilling to take this action, then Congress must step in to achieve the public policy goals of E-911.

Like many rural carriers, our subscriber base is small. The capital requirements for meeting Phase II present a significant expenditure and one without an immediate economic return. Our sys-

tem, like most rural systems, was designed with two goals in mind, efficiency and economy. Many current subscribers are able to enjoy the full benefit of our services because of the use of older three-watt analog phones. Within its decision matrix, our choice of technology to implement Phase II has been limited to a network-based solution, yet, I am not aware of a single rural service provider that has been able to secure a vendor's guarantee that deployment of its network solution in the carrier's market will meet the FCC's accuracy standards.

I refer you to my written testimony for a more detailed outline of the geographic and technological obstacles that require more time for compliance. These issues do not lend themselves to a quick soundbite; yet it is important to note that technology is still a problem in the communities we serve. Technology problems could be eased if the FCC relaxed current accuracy requirements. The current accuracy standards are unrealistic in rural areas. A conclusion affirmed by the unwillingness of vendors to guarantee that their products will allow small carriers to meet the FCC accuracy standards. In fact, the FCC rules allow for averaging, and, in effect, it is an admission that the accuracy results will vary and may not be able to be achieved in rural areas like those we serve. Unlike the large carriers, small carriers cannot tap an urban market to use averaging to comply with the FCC rules.

Cost recovery is also a critical issue for small carriers because of the expense of deploying technology and the very limited ability to recoup costs from subscribers. With such emphasis now on public safety, the Federal Government must ensure that funds are allocated for small wireless carriers to help meet critical public safety needs, without requiring us, by economic necessity, to reduce services now available to our consumers. This applies not only to E-911 Phase II, but also to any future mandates intended to enhance homeland security. The way the FCC has handled Phase II mandates for small carriers confirms the need for legislation that would require the FCC to scrutinize the cumulative impact of regulations on small rural wireless carriers. Such legislation should be introduced and passed by the 108th Congress.

In conclusion, we ask that logic, common sense, and reason prevail. With changes in the requirements, rural communities can still benefit from enhanced public safety services. In short, we ask that the time lines for implementation be extended, the accuracy standards be relaxed, and the government funding be made available for small carriers to defer financial burdens not experienced by the larger national carriers.

Thank you for this opportunity to have participated in our great democracy. I would refer you again to my detailed written testimony to give you a better understanding of the problems confronting small rural carriers, and I will be happy to answer any questions you may have. Thank you.

[The prepared statement of James Callahan follows:]

PREPARED STATEMENT OF JAMES CALLAHAN, PRESIDENT & COO, MOBILETEL, LLC

My name is James Callahan. I serve as the President and Chief Operating Officer (COO) of MobileTel, LLC, headquartered in Larose, Louisiana. MobileTel provides wireless service to LaFourche and Terrebone Parishes, comprising roughly 3300 square miles of mostly sparsely-populated rural territory. Putting this into another

context, MobileTel provides services in Louisiana's 3rd Congressional District represented by the distinguished Energy and Commerce Committee Chairman Billy Tauzin. We at MobileTel are proud of our congressman and consider him not only an effective representative for the interests of the residents of our community, but also a good friend.

First, let me express my appreciation for this opportunity to present testimony before the House Subcommittee on Telecommunications and the Internet on a subject as important as Wireless E-911 services. This is a critical issue confronting wireless carriers, especially small rural wireless carriers, as well as all Americans concerned with public safety. Second, I would suggest that this hearing represents a significant milestone for Congress to hear directly from small rural wireless carriers about an issue that has critical implications for the future of public safety and wireless service delivery in rural America. And third, I want to emphasize upfront that much of my testimony today may seem to focus on the "hurdles" that small rural wireless carriers have experienced since the FCC promulgated its current rules on Phase II E-911—and continue to experience today—as we seek to address the critical public safety needs of consumers in rural America.

But frankly, the deployment of Phase II E-911 is about more than jumping "hurdles" for many small rural wireless carriers. *The FCC's Phase II E-911 requirements have put many small rural wireless carriers, like MobileTel, serving geographic areas that may otherwise have no access to wireless services, at a critical crossroads.* As a result of current FCC Phase II E-911 requirements, many small rural wireless carriers are now being forced to make choices that could mean their geographic coverage areas will not expand to serve areas still unserved. Our service areas may well shrink creating an even greater void in wireless service delivery for consumers living and working in rural America. We are deeply concerned that underserved consumers in rural America will lose out as a result of FCC policies that reflect little understanding of rural America.

I am honored to have been asked to testify at this hearing today on behalf of MobileTel and also represent the nearly 100 member companies that comprise the Rural Cellular Association (RCA). As you know, RCA is a membership association representing the interests of small and rural wireless licensees providing commercial services to subscribers throughout the nation. Its member companies provide services in more than 135 rural and small metropolitan markets where approximately 14.6 million people reside. The RCA was formed in 1993 to address the distinctive issues facing small and rural wireless service providers.

#### SMALL RURAL WIRELESS CARRIERS PROVIDE SERVICES IN NICHE MARKETS

As a small carrier serving rural areas, MobileTel, like most other small rural wireless service providers still in existence today, is able to compete with the national telecommunications conglomerates only because it serves—and serves well—a discrete market niche. *Unlike large carriers that may enter our markets, our coverage extends beyond the population centers and heavily-traveled highways to offer wireless services in more remote areas that also are in need of quality wireless services and would be served by no other carrier.*

For those of you unfamiliar with MobileTel, we are headquartered in Larose, located on Bayou Lafourche. Much of our service area is either fresh or salt water marsh, complete with alligators, nutria, and varieties of birds in the wild. Our service area covers the bayous and marshes, where you can experience a swamp tour, enjoy some of America's best salt water fishing, and travel "down the bayou" through Cajun villages to the Gulf of Mexico. *In other words, our service area is distinctly rural.* MobileTel's subscribers expect, and receive, a high-quality signal throughout our service territory. Our subscribers and the general public benefit from our commitment to maintain a network built to maximize coverage in areas deemed commercially unattractive and unappealing by other wireless service providers.

#### PROMOTING PUBLIC SAFETY

MobileTel recognizes and fully supports the public safety goals reflected in the FCC's E-911 mandates. Safety concerns have always played a large part in MobileTel's network decisions. For example, well in advance of its legal obligation to do so, MobileTel proactively worked with PSAPs throughout its service area to deploy Phase I E-911 technology. Similarly, law enforcement officials are well aware of MobileTel's availability and willingness to work with appropriate authorities on a real-time basis to provide assistance. Like its relationship with its customers, MobileTel's relationship with PSAPs and other public safety officials is local, direct, and open.

## PHASE II E-911 SERVICES: STANDING AT THE CROSSROADS

Small rural wireless carriers have been and are still working very hard in communities across this nation to successfully overcome the Phase II E-911 “hurdles” to rural America’s access to enhanced 911 services. These hurdles include:

- Geography unique to rural America;
- Limits of technology which are not always adequately addressed in discussions about Phase II services but that affect rural markets uniquely; and
- The lack of adequate cost recovery for small rural wireless carriers.

The technical and resource challenges of delivering Phase II E-911 services to rural America are so significant for small rural wireless carriers that many carriers are finding themselves at the crossroads having to make critical decisions that could have the effect of jeopardizing the ability of consumers in very remote parts of the country to have access to quality wireless services, like those now offered by MobileTel and the many other small rural wireless carriers operating across this country.

*The FCC’s E-911 regulations and mandates and the schedule for compliance should be adjusted to fit the realities of the rural marketplace.* If the Commission is unwilling to take this action, then Congress must step in if the public policy goals of E-911 are to be achieved and if we are to ensure that consumers in distinctly rural markets have real access to enhanced public safety services.

Nearly all small rural wireless carriers would have their own story to tell this subcommittee today about the hurdles they have confronted to comply with the FCC’s Phase II E-911 mandate. Although each story may be unique, all would fit a pattern. Each would convey a sense of frustration that the FCC has written rules that seem to be particularly burdensome for small rural wireless carriers and reflect a fundamental lack of understanding about rural America, telecommunications service delivery to rural America, the costs of providing services in remote parts of rural America, and the very special relationship—rooted in what is too often now viewed with cynicism as an old-fashioned commitment to service—that exists between a small rural wireless carrier and the communities they serve. As small rural wireless carriers, we still believe there is nothing old-fashioned about delivering exceptional customer services.

As a rural wireless carrier, MobileTel, like other small wireless carriers serving primarily rural areas, has been working diligently to overcome the limits of technology, the lack of a cost recovery mechanism, and unique geographical characteristics that make compliance with the FCC Phase II E-911 mandate much more than a mere “hurdle,” but a federal regulatory requirement that has a major impact on a company’s viability.

So, today, I would like to tell you my story, but ask you to realize there are companies throughout this nation and serving some of the smallest rural communities in this nation that are experiencing similar challenges. Without a solution, services to consumers—who may be left with no access to wireless services, including basic 911 services, from any other wireless carrier—could suffer.

The FCC’s Phase II E-911 requirement to provide PSAPs with location information within the specified accuracy standards presents MobileTel and other small rural wireless carriers with distinct and specific challenges. First, our subscriber base is small, and that translates into a competitive disadvantage when we have to either absorb the significant costs of Phase II E-911 or spread the costs to relatively fewer customers on a per capita basis.

Second, as a small company with limited resources, the capital requirements for meeting the Phase II obligations present a significant expenditure, one without immediate economic return. That being the case, dedication of resources to a Phase II obligation limits our ability to improve or expand service, and potentially presents even more difficult decisions regarding service continuation.

Third, as a niche market player providing quality service where it may not be available otherwise, we are highly sensitive to any diminution of our ability to provide service area-wide coverage. Our system, like most rural systems, was designed with two goals in mind—efficiency and economy. Accordingly, the network was constructed to cover the most area with the fewest towers. Many current subscribers are able to enjoy the full benefit of our services because of their use of older, 3-watt analog phones.

Within this decision matrix, our choice of technology to implement a Phase II solution has been limited to a “network” solution. Yet, I am not aware of a single rural service provider that has been able to secure a vendor’s guarantee that the deployment of its network solution in the carrier’s market will meet the FCC’s accuracy standards. I understand that these standards are met only under ideal test cir-

cumstances, and, as yet, no real-world applications in hard-to-serve rural America bear out the promise of testing.

#### TECHNOLOGY AND VENDOR ISSUES

Many wireless carriers in rural areas utilize analog and TDMA technology. Consequently, like MobileTel, their Phase II E-911 answers rely on network solutions that generally utilize the triangulation of cell sites to obtain location information for wireless 911 calls. Where cell sites have been deployed to maximize efficiency (that is, utilizing antennas with service footprints overlapping only enough to allow call hand-off between the cell sites), this “string of pearls” configuration makes the determination of location impossible without the construction of additional tower sites and the acquisition of position determining equipment.

Although there is an alternative to triangulation, so-called “Angle of Arrival” or “AOA” technology, it is frequently the case that the existing towers in a “string of pearls” configuration will not support the additional weight of the required specialized AOA antennas and associated feed lines. Even where AOA antennas can be added to existing towers, additional sites still may be required in an AOA scenario to achieve even the predicted accuracy standard—let alone the real-world standard—because of the dense foliage or hilly terrain common in many rural areas. Adding additional cell towers is an extremely costly proposition for rural carriers as well as time-consuming, potentially requiring far more than the available time frame for deployment mandated under current FCC rules.

Under these and similarly difficult technical circumstances, *relaxation of the current accuracy requirements would enable carriers to deploy a solution that meets the public safety needs of rural consumers*. Moreover, relaxation of current requirements would still achieve the public policy objective of providing enhanced public safety services to consumers in rural America. Very recently, MobileTel was able to provide location information on a real-time basis to public safety officials who simply called for assistance. As a local company with direct ties to the community, including the immediate availability of senior, decision-making management on site, MobileTel’s ability to react immediately and directly to community needs is one of its strengths. This characteristic is typical of small, local rural carriers.

Small rural wireless carriers are not necessarily faring any better with the other technical solution—handset location capability—in which much of the location technology is included in a consumer’s telephone. Currently, handset vendors have not developed a product that works with state-of-the-art GSM digital networks, TDMA digital networks, or the older analog technology. The large GSM carriers are choosing instead a network solution that apparently can be implemented with success in urban and suburban settings where population density characteristics generally require a network configuration that supports triangulation without significant additional cell site requirements.

In addition, larger carriers can use their urban coverage areas to meet the FCC’s accuracy standards because averaging of accuracy results is allowed under the FCC’s rules. Thus, larger carriers can comply with the letter of the rules but offer no additional security for consumers in those rural territories that are part of their coverage areas. Bluntly, large carriers can provide no greater accuracy in rural areas than small carriers. However, small carriers, alone, are penalized because they are unable to conform to the FCC’s accuracy guidelines. Small rural carriers do not have the urban base of customers that large carriers can rely on to place enough E911 calls that enable the larger carriers to use averaging as a way to meet the FCC’s location accuracy requirements. This is yet another example of how FCC rules are simply unfair to small rural carriers and the rural consumers that MobileTel and the other members of RCA are committed to serve. Rather than promoting public safety in rural America, the FCC rules place undue burdens on small rural wireless carriers and reflect a basic lack of understanding of rural America, its geography, and its people.

Moreover, small rural wireless carriers have been further disadvantaged by the simple fact of market size and economic potential when they try to secure vendor agreements to purchase technology to meet the FCC’s current requirements. Business management principles and simple logic would suggest that vendors have less interest in working with small carriers and small carriers have less ability to influence the availability of products that will meet the FCC’s requirements in rural America. But, more importantly, many small rural wireless carriers’ experiences with vendors also reflect this fact of doing business in today’s society.

For example, for many carriers choosing network solutions, the experience with True Position, one of two vendors that offer a network “solution,” has been frustrating at best. One RCA member providing service in Illinois’ 19th Congressional



district represented by Congressman John Shimkus has experienced a string of unkept promises, non-returned phone calls, and non-answered e-mails from the vendor. Although having budgeted \$1.5 million for Phase II in 2003 and trying to position itself as the first carrier to offer Phase II services in the market, the small carrier is still without an agreement because it has been misled by a vendor. Now, this small wireless carrier must begin new discussions with Grayson, the other vendor, after more than a year of broken promises and unanswered questions. A year after committing orally to a contract but delaying in signing a contract, True Position now says its technology will not work in this particular market.

Like many carriers, this RCA member company prefers a network solution because of the prohibitive cost of a handset solution. Additionally, the company wants to be able to provide public safety services to all customers, including the more than 500,000 yearly analog roamer calls now supported by the company.

Unfortunately, this experience is not unique. Another RCA member providing service in North Carolina's 5th Congressional District represented by Congressman Richard Burr has been unable to secure a guarantee from Grayson that its network system would meet the FCC's accuracy requirements. Following this, the carrier spent more than a year attempting to work with TruePosition, which again failed to respond in a timely manner to repeated telephone calls and e-mails. Eventually, TruePosition responded but was not willing to execute a contract. The carrier already has received requests from local PSAPs to provide Phase II service. The carrier has now been forced to switch to a handset location solution in an attempt to meet FCC deadlines, and based upon a planned conversion to CDMA technology. The small carrier has successfully executed a contract with a Phase II handset solution vendor. However, it is highly probable that the company could have implemented a Phase II solution by now if many months were not wasted by vendors who initially offered the promise of a network solution but could not deliver on that promise in such a distinctly rural market.

MobileTel has recently decided to make a technology change, which would make a handset solution a possibility. Nonetheless, to replicate our current coverage capability, we again face the specter of significant capital expenditures against a backdrop of limited resources and a small subscriber base. The rational business decision regarding modification of its technical approach at this point, however, is further complicated by considerations of timing obligations related to Phase II E-911 compliance. MobileTel's ability to meet the Phase II E-911 standard with handsets utilizing the new technology will not solve its concerns regarding its legacy customers, who prefer the older handsets and the extended geographic coverage that the older handsets provide. This concern is shared by a number of other small rural wireless carriers.

While these issues have a huge impact on my company and its future, it is also clear that what affects our company—and all small wireless carriers across the rural communities of this nation—also affects our services, and ultimately affects the convenience and safety of the citizens who rely on and use our services. As all of us are now considering the issues of public safety and security in the light of the new realities that recently and sadly have been forced upon this county, MobileTel submits that matters which rise to the level of federal mandates for the purposes of promoting homeland and community security are worthy of federal funding allocations.

#### COST RECOVERY AND THE ECONOMICS OF PHASE II E-911

Cost recovery is a critical issue for small rural wireless carriers because of the expense of deploying the technology and the very limited ability to recoup costs from subscribers. Although some states have cost recovery mechanisms in place, these vary from state to state and will offer only limited opportunities for carriers to recover costs. Public safety is a critical issue for the nation—now more than ever. As Americans, vulnerable for the first time in our modern history on our own continental shores, we look to and expect the federal government to secure and protect our safety. Given the renewed importance of Phase II services, the federal government must be willing to take more responsibility to ensure that Phase II E-911 policy making includes the allocation of appropriate funding for small rural wireless carriers to *help* meet critical public safety needs without having to reduce the level and quality of wireless services now available to our consumers.

We would sound an additional note of caution about any new mandates for public safety and homeland security that may evolve over time. Periodically, we hear rumblings in Larose, Louisiana, from this city on occasion that the FCC and other federal agencies want to look to wireless services as a priority means of communication in times of national emergencies. The emergence and expansion of wireless services

creates new opportunities for this type of emergency communication capability. We in small rural communities have a unique understanding of how wireless services are a critical component of our communities' economies and infrastructure. But, small rural wireless carriers simply cannot afford additional public safety-related regulatory mandates that require additional significant expenditures of capital. Congress must be willing to appropriate money to fund any additional public safety mandates on small rural wireless carriers as part of any national initiative to protect and advance emergency communications and homeland security.

In my discussion of the challenges that MobileTel and other small and rural companies face in meeting the FCC's current Phase II E-911 mandate, the theme you've heard is simple, but critical. Small and rural carriers face distinct challenges, both financial and technical; small and rural carriers often provide service in areas where there is little or no competition; small and rural carriers are local and accountable within their communities. For small and rural carriers, funding is necessary to implement any Phase II E-911 solution within the currently required time frames. At a minimum, both implementation deadlines and technological shortcomings should be reviewed and examined critically by Congress as part of the policy making process.

#### RELAXING CURRENT FCC ACCURACY STANDARDS

We believe the accuracy standards are unrealistic in rural areas and we suggest that the FCC's current rules that allow for averaging are, in effect, an admission by the FCC that accuracy requirements will vary and may not be able to be achieved in rural areas like those we serve. If there was not a problem with meeting the accuracy requirement in a rural area, then why would the FCC even offer averaging as a way to accomplish the public policy goal of enhanced 911 services? *Averaging provides flexibility that helps large carriers comply with the FCC's accuracy requirements but it discriminates against the small rural carriers who cannot tap urban customers to fit a mathematical formula that has no bearing on meeting the public safety needs of rural consumers.*

In rural areas, the accuracy standard can be substantially lower than it is in urban areas without compromising public safety. I say this not only as the COO of a wireless telecommunications company delivering services in rural areas, but I say this also as a resident of a rural community charged with the responsibility of enhancing the public safety for my neighbors, friends, and family. With a relaxed standard, public safety personnel will still have as good of an opportunity to locate the calling party—certainly better than if there was no wireless service at all. Revised accuracy requirements for both network-based and handset-based technologies in rural areas should be adopted by the Commission after verifying the availability of location products and solutions that work, so that consumers in rural areas can have access to quality public safety services.

If the Commission is unwilling to do this, then Congress should step into the void quickly so we can get about the business of improving public safety communications in rural America.

#### FCC RULES HAVE A UNIQUE IMPACT ON SMALL CARRIERS

Finally, we believe that the FCC should have more carefully scrutinized the types of problems that small rural wireless carriers would confront to deploy Phase II E-911 technology. Although we applaud the Commission's initiative that produced the Hatfield Report, it is the type of study that should have been initiated much sooner by the FCC.

We recognize the public interest in focusing attention on national carriers and encouraging compliance on an expedited basis. However, the way the FCC has handled the Phase II E-911 mandates confirms the need for legislation that would require the FCC to scrutinize the impact of regulations that affect small and rural wireless carriers. This type of legislation was introduced in the 107th Congress and we would encourage its introduction and passage in the 108th Congress. Public law that now requires regulatory agencies to assess the impact of their rules on small businesses has simply failed to protect small businesses, such as MobileTel, and has failed to identify the true impact of FCC regulations on small rural wireless carriers.

If such adequately protective legislation had been public law when Phase II E-911 regulations were first promulgated, the FCC would have been required to offer better direction and guidance to small rural wireless carriers and we—both collectively and as individual companies—could have saved the money, time, and other resources that we have expended to bring these issues to the attention of the FCC and other policy makers at the federal level. At a minimum, the FCC could have

determined earlier in this process that small rural wireless carriers would need more time to comply with the Phase II E-911 mandate given the geographical obstacles for compliance, the lack of real-world tested technology that could meet the FCC's requirements in rural areas, and the capital costs of deployment that are shaking the very foundations of our businesses in rural America.

It is important to note that small rural wireless carriers, like all telecommunications providers, are in the business of expanding services and improving service delivery. We do not like the fact that many of us now may be forced to reduce our service area in order to comply with an FCC mandate when our business and community instincts are to invest in our systems and our customers. We want to improve our services and ensure that rural America has access to all that wireless can offer. We are uniquely positioned in our markets to work to expand service delivery and we are committed to serve all parts of the rural communities that comprise the rural American marketplace—not just those that are most lucrative. But with limited capital budgets, federal regulatory mandates take a greater toll on our ability to expand services for consumers in rural America. What may have only limited financial impact on a large nationwide carrier can be economically devastating for companies, like ours, with such limited capital budgets.

Too often, the FCC fails to recognize the cumulative impact of its mandates on our businesses—but even more importantly, on the consumers, both businesses and individuals, in rural America who rely on us for wireless services. For some small rural wireless companies, their very survival has been threatened by the additional costs associated with complying with cumulative FCC mandates.

#### CONCLUSION

Like all small rural wireless carriers serving communities across this country, MobileTel is committed to working with federal and local authorities to maintain and improve public safety. We commend the Subcommittee for holding this hearing. As we have tried to work with the FCC over the years on this issue, we stand ready to work with the members of this Subcommittee and the full Energy and Commerce Committee to speed deployment of enhanced 911 services.

We simply ask that logic, common sense, and reason prevail. In short, we ask that the timelines for implementation be extended, the accuracy standards be relaxed, and government funding be made available for small rural carriers to defray financial burdens not experienced by the larger nationwide carriers.

Thank you for this opportunity.

Mr. UPTON. Thank you.

Mr. O'Connor.

#### STATEMENT OF MICHAEL O'CONNOR

Mr. O'CONNOR. Good morning, Mr. Chairman and members of the subcommittee. And thank you for giving Verizon the opportunity to present its views on wireless E-911.

My name is Michael O'Connor, Director of Federal Regulatory Affairs for Verizon, and in that capacity, one of my responsibilities is managing E-911 policy issues throughout the Verizon footprint. Additionally, I am a member of the National Emergency Number Association, and a participant in the NENA Strategic Wireless Action Team initiative.

As an initial point, I would like to define the role of a local exchange carrier or LEC in enabling the provision of wireless E-911 capabilities. Simply, the LEC typically has two functions. One is to provide the connections and services necessary to get the E-911 information from the wireless provider to the PSAP. And the second function, historically, has been the LECs often serve as the project manager for wireless E-911, coordinating and facilitating the activities of the other participants. The Verizon telephone companies have established a reputation as an industry leader in supporting wireless E-911 implementation. During the recent E-911 Coordination Initiative hosted by the FCC, Steve Marzolf, the Public Safety Communications Coordinator for the Commonwealth of Virginia

stated, "I would be remiss if I did not also mention the support and commitment we have received from our local exchange carriers, Verizon and Sprint."

Comments such as these are not isolated perspectives. Verizon local telephone companies have been able to attain and maintain a leadership position in wireless E-911 deployment through several corporate policy initiatives. Foremost among these initiatives, Verizon has created an internal wireless implementation team that works with PSAPs, CMRS carriers, and third-party providers in developing, implementing and testing wireless E-911. At the request of PSAPs or State 911 boards, this Verizon team has visited and provided expertise to more than 1,100 PSAPs in over 30 States. Verizon currently serves as the E-911 coordinator for approximately 2,000 PSAPs.

Additionally, the Verizon telephone companies are currently ready to meet all regulatory deadlines for wireless E-911 deployment. In 2002, then Chief of the Wireless Telecommunications Bureau Sugrue requested the largest local exchange carriers to provide information about their readiness to carry out their roles in wireless E-911 deployment. At that time, Verizon reported its ability to handle any PSAP or wireless carrier request for wireless E-911 service within the deadlines established by the FCC's rules.

Last, Verizon has established a policy of safety first, tariffs later. Verizon believes that all E-911 system providers must be allowed a fair return on their investment. Nonetheless, we have established a policy that to the extent tariff modifications are necessary, Verizon will complete the implementation efforts for wireless E-911 deployment whether or not the tariff changes have made their way through the approval process.

So that is what Verizon is doing to help deploy wireless E-911, but the salient question for this morning is what can be done to move the process forward and achieve the goal of universal availability of wireless E-911? Verizon suggests the following principles are fundamental to achieving that goal: First, public funding should be used to support universal availability of wireless E-911. As many of the subcommittee members have noted and some of the panel members have noted, E-911 service is not simply a useful option for wireline and wireless customers. It is widely acknowledged to be a public safety feature that benefits the entire community. Customers use E-911 service not only to report their own emergencies but also to report events that involve other persons such as accidents, health emergencies, crimes and natural disasters. In particular, all of society has an interest in a robust wireless E-911 system that is as capable as the wireline system of providing the information that PSAPs need to respond to emergencies.

The effect of lack of funding cannot be ignored. The funding mechanisms for PSAPs involve local determinations on how to develop the financial means to implement and maintain the service. In the current economic environment, local funding for wireless E-911 is a serious concern. Taking funding out of the equation would promote wider and faster deployment of wireless 911 service.

In most States, funding of E-911 implementation costs for PSAPs wireline carriers, and in most cases wireless carriers, is accomplished through surcharges on the wireless and wireline customer.

This is not an optimum solution. Such surcharges inflate the prices for telecommunication services and lower demand. Verizon believes that development of public funding for E-911 service through general tax revenues rather than through additional telecommunications surcharges serves the public interest.

As a second principle, Verizon advocates nationwide coordination for wireless E-911 deployment and policy, and supports Dale Hatfield's recommendation, noting that we believe the National 911 Program Office within the Department of Homeland Security supported by a Federal advisory committee would assist in addressing the policy issues concerning implementation for wireless 911.

And as a final principle, Verizon advocates that all constituencies that provide wireless 911 functionality are allowed to recover costs. In the E-911 coordination initiative hosted by the FCC, Chairman Powell opened the meeting and had the following observation: "... we must work together to move wireless carriers, manufacturers, consumers along the migration trail for E-911 capability while ensuring the necessary ILEC capabilities are made available in a timely manner on financially reasonable terms. Verizon believes that the capital expenditures necessary to achieve the goal of universal availability of wireless E-911 will be enhanced when the investors and the technologies be allowed an expectation of a reasonable return.

That concludes my formal testimony. Thank you for giving me the opportunity, and I would be happy to answer any questions that the committee might have.

[The prepared statement of Michael O'Connor follows:]

PREPARED STATEMENT OF MICHAEL O'CONNOR, DIRECTOR OF FEDERAL REGULATORY AFFAIRS, VERIZON

Good morning Mr. Chairman and members of the Subcommittee. And thank you for giving Verizon the opportunity to testify and present its views on E911.

My name is Michael O'Connor, Director of Federal Regulatory Affairs for Verizon. In that capacity, one of my responsibilities is managing E911 policy issues throughout the Verizon footprint. Additionally, I am a member of the National Emergency Number Association (NENA), and a member of the NENA Strategic Wireless Action Team (SWAT) initiative.

As an initial matter, let me define my understanding of the term "wireless E911". My view is that wireless E911 is the capability to determine the location, in terms of latitude and longitude, of a caller who dials 911 on a cellular telephone. This is sometimes referred to as wireless Phase II capability. To make this work, the wireless provider must transmit information sufficient to make this determination and the agency providing the 911 service must have the equipment required to use this information.

One might ask, "What is the role of a Local Exchange Carrier (LEC) in enabling the provision of wireless E911 capabilities?" The LEC typically provides various connections and services to get the E911 information from the wireless provider and the government agency operating the 911 service. These services include:

- 1) Links ordered by CMRS carriers to our E911 tandems (sometimes called Selective Routers). Links ordered by Public Safety Answering Points (PSAPs) to connect our E911 tandems to the PSAP location.
- 2) Customer Premise Equipment (CPE) that allows PSAP personnel to interpret location data.
- 3) Connections to wireless information databases that contain location information.

The LEC can also serve as project manager for wireless E911, coordinating and facilitating the activities of the other participants. This coordination and facilitation is critical to the timely deployment of the wireless E911 capability.

The Verizon telephone companies have established a reputation as an industry leader in supporting wireless E911 implementation. This reputation was acknowledged during the recent "E911 Coordination Initiative" hosted by the FCC. Steve

Marzolf, public safety communications coordinator for the Commonwealth of Virginia stated, "I would be remiss if I did not also mention the support and commitment we have received from our local exchange carriers, Verizon and Sprint. They have been proactive with system upgrades." Steve Marzolf further stated, "They (Verizon and Sprint) have been a strong member of the deployment team almost from the start of the project. I know many other states and PSAPs have complained. We've heard here today about problems with the local exchange carriers being an impediment to progress. I'm very pleased to say that's not been the case for us."

Comments such as these are not isolated perspectives. Verizon local telephone companies have been able to attain and maintain a leadership position in wireless E911 deployment through several corporate policy initiatives.

Foremost among these initiatives, Verizon has created an internal wireless implementation team that works with CMRS carriers and third-party providers in developing, implementing and testing wireless E911. At the request of PSAPs or state 911 boards, this team has visited and provided expertise to more than 1100 PSAPs. Verizon currently serves as the E911 coordinator for approximately 2000 PSAPs.

One of the goals of these visits is to educate PSAPs about the way in which LEC and CMRS networks function. This education process includes providing descriptions of the different technologies used to provide wireless E911, reviewing call flow when the technologies are deployed, and explaining the activities PSAPs need to undertake to accomplish wireless E911.

Additionally, the Verizon telephone companies are currently ready to meet all regulatory deadlines for wireless E911 deployment. In 2002, then Chief of the Wireless Telecommunications Bureau, Sugrue, requested the largest local exchange carriers to provide information about their readiness to carry out their roles in wireless E911 deployment. At that time, Verizon reported its ability to handle any PSAP or wireless carrier request for wireless E911 service within the deadlines established by the FCC's rules.

Lastly, Verizon has established a policy of safety first, tariffs later. One of the often heard reasons for the delay in wireless E911 implementation has been that the E911 system providers have been unwilling to deploy the technology until state tariffs for additional services have been established. Verizon believes that all E911 system providers must be allowed a fair return on their investment. Nonetheless, we have established a policy that, to the extent tariff modifications are necessary, Verizon would complete the implementation efforts for wireless E911 deployment, whether or not the tariff changes had made their way through the approval process.

So, that is what Verizon is doing to help deploy wireless E911. But the salient question for this morning is "What can be done to move the process forward and achieve the goal of universal availability of wireless E911 Verizon suggests the following principles are fundamental to achieving that goal:

First, public funding should be used to support the universal availability of wireless E911. E911 service is not simply a useful option for wireline and wireless customers—it is widely acknowledged to be a public safety feature that benefits the entire community. Customers use E911 service not only to report their own emergencies, but also to report events that involve other persons, such as accidents, health emergencies, crimes, and natural disasters. In particular, all of society has an interest in a robust wireless E911 system that is as capable as the wireline system of providing the information that PSAPs need to respond to emergencies. As such, public monies should be used to support the necessary infrastructure and operational expenses associated with providing the service.

The roll-out of wireless E911 service is hindered in most areas by the lack of adequate funding and the use, in some states, of money from E911 cost recovery mechanisms for other public purposes. The FCC has addressed the issue of which types of costs must be borne by wireless carriers vs. PSAPs. However, the issue of PSAP funding has yet to be addressed.

The effect of a lack of funding cannot be ignored. The funding mechanisms for PSAPs involve local determinations about how to develop the financial means to implement and maintain the service. In the current economic environment, local funding for wireless E911 is a serious concern. Taking funding out of the equation would promote wider and faster deployment of wireless 911 service.

In most states, funding of E911 implementation costs for PSAPs, wireline carriers and, in most cases, wireless carriers, is accomplished through surcharges on wireless and wireline customers. This is not an optimum solution. Such surcharges inflate the prices for telecommunications services and lower demand.

Verizon believes that the development of public funding of E911 service through general tax revenues rather than through telecommunications surcharges serves the public interest.

As a second principle, Verizon advocates nationwide coordination of for wireless E911 deployment and policy. The evolving nature of technology and new types of communications services, such as voice over the Internet, will require closer coordination for the efforts of government and private entities.

Verizon recommends that the Congress focus on two areas—creation of a National 911 Program Office within the Department of Homeland Security, and creation of a Federal advisory committee. The National 911 Program Office should coordinate state and local emergency activities within the context of nationwide security planning. The advisory committee should include representatives of all stakeholders, including trade associations, carriers, vendors, and federal and state regulatory agencies. The advisory committee would be a resource for collecting information and providing analyses to assist the DHS in addressing policy issues concerning the implementation of E911 services for wireline carriers, wireless carriers, and new, emerging communications media, such as handheld computers and voice over Internet technologies.

As a final principle, Verizon advocates that all constituencies that provide wireless E911 functionality are allowed to recover costs. In the aforementioned “E911 Coordination Initiative” hosted by the FCC, Chairman Powell opened the meeting and had the following observation, “...we must work together to move wireless carriers, manufacturers, consumers along the migration trail for E911 capability while ensuring that the necessary ILEC capabilities are made available in a timely manner on financially reasonable terms.”

Verizon believes that the capital expenditures necessary to achieve the goal of universal availability of wireless E911 will be enhanced when investors in the technologies be allowed an expectation of a reasonable return.

This concludes my formal testimony. Thank you for giving me the opportunity today to share Verizon’s views on wireless E911. I would be happy to answer any questions that the committee may have.

Mr. UPTON. Thank you very much.

Mr. Amarosa, welcome.

#### **STATEMENT OF MICHAEL AMAROSA**

Mr. AMAROSA. Good morning Mr. Chairman and members of the subcommittee.

My name is Michael Amarosa. I am the Senior Vice President of TruePosition. I would like to start by thanking you and Representative Markey and other subcommittee members for their leadership on this important public safety issue of wireless E-911.

The recently established Congressional E-911 Caucus, which Representatives Shimkus and Eshoo chair in the House, is a further source of support for this critical effort. In recent months, wireless E-911 implementation has made great progress. Carriers are pursuing their responsibilities forthrightly. Several States and local governments have under consideration legislation that will address the challenges of modernizing 911 communication centers, public safety answering points, PSAPs, to receive the location information. The combination of focused and stable responsibilities that are seriously enforced with clear requirements for carriers and funding assistance for 911 communication centers is a major source of progress.

Timely and effective emergency response means getting the right people with the proper equipment to an emergency expeditiously. I spent 24 years working in public safety, including managing the largest 911 center in the Nation in New York City’s Police Department. During my tenure, the NYPD undertook and completed major upgrades of the system supporting 911.

More recently, my role at TruePosition has given me the opportunity to work with the full range of 911 communication centers. The challenges the systems face today in implementing E-911 par-

allel past efforts to bring modern technology to emergency response. TruePosition has made a substantial investment to develop and provide commercially available location technologies that fully comply with the FCC requirements to find any phone, anywhere. TruePosition's research, development, testing and implementation have made E-911 a reality. We continue to work with the public safety community and with the carriers both large and small to bring about pervasive E-911.

TruePosition provides location technology today to wireless carriers in 37 markets. For example, TruePosition has deployed its technology in over 5,200 of Cingular cell sites. The implementation agreed upon by Cingular and the FCC was met and Cingular continues to use our technology to fulfill new requests for 911 communication centers for location information that meets the FCC's accuracy rules. The action by Cingular and TruePosition is a distinct and tangible demonstration that E-911 is a reality.

TruePosition's system works in almost any environment—indoor, outdoor, urban, suburban or rural. It provides nearly 100 percent yield and is not affected by obstructions as tall buildings or concrete walls. This accuracy in precision is critical for emergency responders as almost 55 million calls to 911 are made annually from wireless phones. The discovery development and evaluation phase for wireless E-911 technology is largely complete. For progress to continue, it is important that the FCC's principal regulations be maintained with respect to implementation, timing, location, accuracy as that it technology is available for deployment. Wireless E-911 is a systems problem, resulting from the reality that different components of the system are independently controlled.

The key to successful deployment lies in speeding up the lagging factors rather than slowing the leading ones. This means assuring investment in PSAP infrastructure and delineating the responsibilities of private interest carefully. Constant change to E-911 deployment deadlines and accuracy requirements are counterproductive. Public investment in ensuring the 911 communication centers are able to receive and use 911 and other information is a critical part of improving homeland security and should be considered a national priority deserving of financial assistance. Congress should build upon its actions earlier this year in the Wartime Supplemental Appropriations Act, which recognized the relationship between E-911 deployment and homeland security by funding PSAP infrastructure improvements.

The individuals who staff the local 911 centers are the first of the first responders, a citizen's contact when facing an emergency. Confronting the challenge of improving homeland security by improving the efficiency of our 911 centers will provide tangible improvements toward getting the right emergency help to an incident sooner.

The current PSAP infrastructure faces the challenge of integrating various technologies to bring about an automatic number and automatic location information. Without an increased investment, the current PSAP infrastructure would be constrained in its ability to bring 911 to all Americans.

Investment must be directed to upgrading the internal PSAP infrastructure so that that location information and other caller in-



formation now being provided by wireless carriers can be transmitted efficiently and effectively to 911 communication centers. Funding assistance should be first predicated upon specific objective of modernizing customer premise equipment of the 911 centers so that their infrastructure is capable of an effective and efficient receipt of an automatic number, automatic location, and other information via wireline, wireless and emerging forms of communications technology. Funding should also be available to train personnel to operate the upgraded systems. Second, present funding structures for 911 communications remain a very serious problem. There are numerous circumstances where money is assessed against wireless phone use, ostensibly for the purpose of E-911 and other emergency communications service cost recovery, are much too often diverted to fund other programs or cover State and local government fiscal shortfalls. Any financial assistance should address and correct this problem.

I commend the subcommittee's leadership in bringing forth nationwide enhanced 911 systems. E-911 will help individuals in need. It will save lives and property and make all of us more secure. TruePosition values this opportunity to appear before you today, and I thank you for the time that you have allotted to me.

[The prepared statement of Michael Amarosa follows:]

PREPARED STATEMENT OF MICHAEL AMAROSA, SENIOR VICE PRESIDENT,  
TRUEPOSITION, INC.

Good morning Mr. Chairman and Members of the Subcommittee. My name is Michael Amarosa and I am Senior Vice President of TruePosition, Inc. It is a privilege to appear today as part of the Subcommittee's continuing oversight regarding implementing E911 Emergency Calling Systems. Enhanced 911 or E 911 is the technology that locates individuals calling for help from a wireless phone. The technology saves lives, protects property, and contributes to a more secure America.

In recent months wireless E911 implementation has made great progress. Carriers are pursuing their responsibilities forthrightly. Moreover, several states and local governments have under active consideration legislation that will address the challenges of modernizing 911 communications centers—public safety answering points (PSAPs)—to receive location information. Just as significantly, Congress has passed legislation that integrates E911 with homeland security initiatives by making funding available to local communities as part of this National priority. The combination of focused and stable responsibilities that are seriously enforced with clear requirements for carriers and funding assistance for 911 communications centers is a major source of the progress.

TruePosition is particularly proud that Cingular Wireless has implemented location capability in more than 5200 cell sites across the country with TruePosition technology. It highlights that TruePosition technology complies with the accuracy and other requirements ("Phase II requirements") of the Federal Communications Commission (FCC). This result brings tangible meaning to E 911; those making calls on these networks can be located by PSAPs able to receive the information. The delivery of this capability to the American public, in conformance with the FCC's rules, brings a strong impetus to all interests pursuing implementation. It reflects that the FCC's requirements are reasonable and reachable.

TruePosition commends the Subcommittee, Chairman Upton and Representative Markey, and other members for your lasting leadership on this important public safety issue. Much progress can be traced to the Committee's conviction that E 911 brings faster emergency response to all areas of the country, rural, urban and suburban, and that E 911 should be a reality. The recently established Congressional E 911 Caucus, which Representatives Shimkus and Eshoo chair in the House, is a further source of support to this critical effort.

Timely and effective emergency response means getting the right people with the proper equipment to an emergency expeditiously. I spent 24 years working in public safety and was honored to manage the largest 911 center in the Nation, that of the New York City Police Department (NYPD), as Deputy Commissioner for Technological and Systems Development. A fundamental principle of the NYPD was to

bring to public safety technologies that speed police, firefighter and emergency medical service response to the citizen needing help. During my tenure, the NYPD undertook and completed major upgrades of the systems supporting 911. This effort included obtaining funding, designing the system upgrades, and implementing the upgrades operationally. This endeavor reflects a microcosm of the ongoing national effort to deploy wireless E 911. Since leaving the NYPD, my role with TruePosition has given me the opportunity to work with the range of 911 communications centers, large and small, urban, rural and suburban. The challenges the system faces today in implementing E911 parallel past efforts to bring modern technology to emergency response.

TruePosition's very existence evolves from wireless location technology. We have made a substantial investment to develop and provide commercially available location technologies that comply fully with requirements established by the FCC. TruePosition's research, development, testing and implementation have made E 911 a reality. We continue to work with the public safety community and with carriers, both large and small, to bring about pervasive E 911. The result, not only of our efforts, but those of government and carriers, is that we now see a tangible demonstration of what E911 brings to emergency response.

TruePosition is providing location technology to wireless carriers in 37 markets. TruePosition's relationship with Cingular Wireless LLC represents the most definitive and extensive rollout of E 911 to date. Recently, TruePosition and Cingular Wireless expanded their relationship to encompass Cingular's GSM network. The agreement reflects TruePosition's extensive expertise, testing and experience in providing location solutions across the United States for the full range of wireless technologies.

TruePosition has deployed its technology on over 5200 of Cingular's cell sites. The implementation schedule agreed upon by Cingular and the FCC was met, and Cingular continues to use our technology to fulfill new requests from 911 communications centers for location information that meets the FCC's accuracy rules. The action by Cingular and TruePosition is a distinct and tangible demonstration that E 911 is a reality.

#### TRUEPOSITION, INC.

TruePosition's systems work in almost any environment be it indoor, outdoor, urban or suburban, "Anyphone, Anywhere"<sup>1</sup>. The TruePosition system provides nearly 100% yield and is not affected by obstructions such as tall buildings or concrete walls. This capability is critical for emergency responders, who depend upon accurate and precise information regarding the location of the individual needing help.

When a person calls 911 from a traditional wireline phone, public safety agencies typically can automatically determine the individual's location; if the same person calls from a wireless phone, a public safety agency, historically must rely on the caller to provide an accurate location. As almost 55 million wireless calls to 911 are made annually from wireless phones, the continued rollout of E 911 is critical.

TruePosition's technology is network-based; there is no modification necessary to consumer handsets; nor will consumers need to purchase new GPS-equipped handsets as is required by other E 911 solutions. This means that TruePosition's system can locate any mobile phone, new as well as old. All existing phone sets can be located on the TruePosition system within the requirements set by the FCC, as soon as the wireless carrier completes deployment. There is no need to wait years as consumers slowly replace their handsets. Our technology encompasses the four major wireless air interfaces: automatic message processing system (AMPS), code-division multiple access (CDMA), time-division multiple access (TDMA) and Global System for Mobile communications (GSM).

The TruePosition system determines a wireless phone's geographical location by collecting and processing the RF signals transmitted by the phone. When a signal is transmitted—when a phone call is placed—the system gathers information about the signal from nearby mobile base stations. The data are transmitted to a processor that analyzes the information and computes the position of the caller by using TruePosition's patented Time Difference of Arrival (TDOA) and Angle of Arrival (AOA) algorithms. For a 911 call, the TruePosition system then determines the location of the call and delivers the information so that the appropriate PSAP can dispatch assistance to the caller.

Recently, TruePosition's technology, U-TDOA, one of three high-accuracy wireless location technologies, has been formally standardized by the Third Generation Part-

<sup>1</sup> "Anyphone, Anywhere" is a registered trademark of TruePosition, Inc.

nership Project (3GPP), the official governing body for development and standardization of GSM and UMTS networks. The 3GPP decision provides wireless operators with the assurance that TruePosition's technology will have seamless interoperability between various vendors' equipment and that the technology will be widely accepted and maintained. It is another indication of the reality of E 911.

#### THE FEDERAL COMMUNICATIONS COMMISSION E 911 MANDATE

Wireless telephone carriers are required to provide Automatic Location Identification (ALI). Under the FCC's rules there are separate accuracy requirements and deployment schedules for network-based and handset-based technologies. The FCC has also developed different timetables depending on carrier size. FCC enforcement actions have led to several of the largest carriers committing to specific deployment schedules.

The FCC's efforts have been ongoing since 1994. The principal requirements have been in place since 1996. The FCC's policies and enforcement actions demonstrate substantial judgment and commitment, and encompass expertise in engineering, economics and law. It has comprehended the investment that must be made and the evolving technology. It has resolved difficult issues and struck a careful balance between the critical need for location information by the American public, while affording carriers and providers adequate time to come into compliance. Through its action, the FCC has made clear how critical E 911 is; it can be the difference as to whether assistance can arrive in time.

TruePosition's network technology network is not only effective but also fully compliant with the FCC accuracy standards. The FCC has scrutinized carrier progress. It has also sought to define the parameters of responsibilities among the various interests so as to bring accountability to the entire process. Overall, the FCC has pursued a "results-oriented, cooperative approach" where tangible displays of good faith are viewed as legitimate efforts to meet the objective of pervasive E 911.

Recognizing the range of interests that must join together in this effort, and the need to emphasize the public policy that E 911 be a reality, the FCC held a productive forum addressing E 911 implementation. At the forum, the various interests—government agencies, carriers, and public safety organizations—participated in day long discussions addressing how to achieve pervasive E 911. The FCC's commitment toward bringing about E 911 to all Americans is demonstrated by the leadership role it has shown.

#### THE 911 INFRASTRUCTURE

The discovery, development, and evaluation phase for wireless E 911 technology is largely complete. Technology unquestionably capable of providing the level of accuracy mandated by the FCC is available. Installation is largely accomplished in several major markets demonstrating what can be accomplished with reasonable effort.

For progress to continue, it is important that the FCC's principal regulations be maintained with respect to implementation timing and location accuracy, as that technology is available for deployment. The progress that has been made, and that which will follow, can be attributed to delineating clearly the responsibilities of each of the interests that needs to cooperate to implement E 911. The respective obligations of carriers, local exchange carriers and public safety agencies must continue to be unmistakable.

In the context of the 911 communications centers, wireless E 911 deployment is a systems problem, resulting in part from the reality that different components of the system are independently controlled. In my experience, the key to successful deployment in this situation lies in speeding up the lagging factors rather than slowing the leading factors. As a practical matter, this means assuring investment in the PSAP infrastructure, and delineating the responsibilities of private interests (i.e. the carriers) carefully. The obligations of the wireless carriers, the local exchange carriers, and the other entities that contribute to E 911 effectiveness must be spelled out and they must be stable. Constant changes to E 911 deployment deadlines and accuracy requirements must be recognized as counterproductive.

There is reason for optimism. The recent progress in E 911 deployment carries a very important implication for how soon E 911 becomes universally available. The deployment of E 911 systems that has begun will produce vast and increasing amounts of relevant information as an inevitable by-product. That information is likely to prove invaluable to all of the wireless E 911 stakeholders—consumers, public safety agencies, PSAP service providers, wireless carriers, technology companies, and regulators. TruePosition believes that it will affect public demand for wireless E 911 service; demonstrate best practices with respect to design, deployment, and

operation of wireless E 911 equipment and service; and provide benchmarks against which to judge progress and performance.

Again, my experience in public safety counsels that once there is tangible evidence of a service, and how it can speed emergency response, the public comprehends the importance and advocates its priority. Once embraced by a community's political leadership, the financial challenges to finding the public investment necessary to enhance the emergency response infrastructure moves toward resolution.

#### FUNDING THE 911 INFRASTRUCTURE

Public investment in ensuring that 911 communications centers are able to receive and use E 911 and other information is a critical part of improving homeland security and should be considered a National priority deserving of financial assistance. The individuals who staff the local 911 centers are the first responders a citizen contacts when facing an emergency. Confronting the challenge of improving homeland security by improving the efficiency of the Nation's 911 centers will provide tangible improvement toward getting the right emergency help to an incident sooner.

The current PSAP infrastructure, the communications centers that receive 911 calls, face the challenge of integrating the varying technologies that bring about automatic number information and automatic location information that are the fundamentals of E 911. Without increased investment, the current PSAP infrastructure will be constrained in its ability to bring E 911 to all Americans. Investment must be directed to upgrading internal PSAP infrastructure so that the location information and other caller information now being provided by wireless carriers can be transmitted efficiently and effectively to the 911 communications center. Fostering investment in the PSAP infrastructure is a critical element in bringing E 911 to the public. It will enhance the quality of emergency response.

The funding issue encompasses at least two elements. The first is providing adequate funding that allows each community to make the necessary upgrades to receive E 911 information. The second is to analyze present funding mechanisms to determine whether monies are appropriately directed.

We begin with one advantage. The formal institutional structures are in place. There is no need to create a new significant governmental apparatus to provide what is needed. State and local governments have built and managed 911 communication centers effectively. The centers are an important part of providing core public safety services to their communities. In a very real way, 911 communications centers are instrumental in providing the most basic government service and their performance is a measure of how well government is responding to its citizens.

Funding assistance should be predicated on the specific objective of modernizing customer premises equipment of the 911 centers, including design and modification so that the 911 communication center infrastructure is capable of effective and efficient receipt of automatic number, automatic location, and other information via wireline, wireless and emerging technology forms of communication. Funding should also be available to train personnel to operate the upgraded systems.

In this latter regard, the ongoing educational efforts of the National Emergency Numbering Association (NENA) has significantly aided both small and large PSAPs in understanding the FCC's rules and what must be undertaken to meet the formal requirements for making a valid request to a carrier for wireless location information. These efforts should continue and will assist in ensuring that funds are properly directed to meet the goal of a nationwide E 911 capability.

In an important related issue, present funding structures for 911 communications centers remain a very serious problem. There are numerous circumstances where the monies assessed against wireless phone use, ostensibly for purposes of E 911 and other emergency communications service cost recovery, are much too often diverted to fund other programs or cover state and local government fiscal shortfalls. Any financial assistance should address and correct this problem. TruePosition believes that this will ultimately be corrected. As wireless location is implemented, it will produce material improvements in safety of life and property. As dramatic episodes of the technology's effectiveness come to light, it should create a public demand for installation in every community, making the diversion of funds less likely. In the meantime, however, it is a practice that should be actively discouraged.

An indication of progress is that several state legislatures in their current sessions have under active consideration proposals that will establish or reform funding mechanisms for PSAP implementation of E 911. These important endeavors, when combined with Congress' action in the Wartime Supplemental Appropriations Act, signed by the President on April 16, 2003, which recognized that modernizing 911 communications centers so E 911 information can be received is an integral part of

homeland security, and makes available resources to state and local governments, reflects significant progress.

#### SUMMARY

E 911 is a reality. Its place in providing a more secure homeland by providing more expeditious response to the citizen as a critical tool for the Nation's first responders is demonstrated by the progress made since the Subcommittee's last hearing. TruePosition continues to work closely with large and small public safety agencies and the dedicated associations and individuals that represent them, to best integrate our system into the 911 communications centers that receive emergency calls. We have also worked closely with wireless carriers in their significant cooperative effort toward the goal of E 911 deployment. We think that an emphasis on those circumstances where challenges remains, such as the need for investment to upgrade the nation's 911 communication centers, while maintaining the principal E 911 schedules and accuracy standards, is the most direct and timely path to pervasive wireless E 911.

We commend the Subcommittee's leadership in bringing forth nationwide Enhanced 911 systems. E 911 will help individuals in need. It will save lives and property and make all of us more secure.

TruePosition values the opportunity to appear before you today.

Mr. UPTON. Again, we appreciate all of your testimony this morning. At this point we will begin questioning from the members that are here.

The bottom line is this is a national priority. We have had a number of hearings on this issue, and I can recall that virtually every member of this panel had made a 911 call using their cellular phone. There was some frustration for those calls that didn't come through. Mr. Engel raised the case of a very tragic situation earlier this year, those four young kids on the river. And while I have called for the establishment of a national E-911 office in the Homeland Security Department, as Mr. Hatfield had recommended in his report, I was interested in Mr. Green's comments, and I don't know whether Homeland Security is the best place.

Maybe particularly Mr. Hatfield, you are here today as a private citizen but as the former Acting Administrator of NTIA, what are your thoughts between those two as to where it might go?

Mr. HATFIELD. Thank you, Mr. Chairman. I don't want to start out by ducking your question.

Mr. UPTON. I am not going to let you.

Mr. HATFIELD. But, quite frankly, as I said in my testimony, I just don't know all the dynamics now among the different agencies here that have responsibility in this area. I would say you mentioned NTIA. Historically, NTIA in the very beginning played a very active role in getting the original 911 out. So perhaps that would be a possibility but basically I am afraid I am ducking your question because I just don't feel I have my hand on the pulse of what is going on here.

Mr. UPTON. You agree that we need someone at the Federal level to ride herd on the States? Particularly frustrating, to I am sure every member of this panel, is the fact that some States have a record of diverting the funds collected. Some States don't even have a State Coordinator, and even those that do, some of them are not all that efficient and may just be a name plate on the door with really no power to work with the counties or the local first responders.

Any other comments on the panel in terms of where the national office might fit? Any recommendations or thoughts?

Mr. MELCHER. Well, I think from a public safety perspective, we wouldn't exactly have a target for you, but the input we would like to give you is that it should make up expertise that deals with what we are dealing with. Homeland Security may or may not be the best place. It is really a telecom/public safety issue, as I mentioned earlier, and as you have the appropriate expertise from the appropriate constituents that are involved, I think you have the model for success.

One of the things that we may be able to deliver to you is the consensus recommendation on where that should go and that is what is going on with the SWAT initiative right now with all of the players, and while I don't want to preempt the outcome of that because we are still in the process to which we are very committed, perhaps that might be one of the deliverables that you could ask us for, and we might be able to give you some recommendations, as a group, of consensus.

Mr. UPTON. Mr. Muleta, you are not volunteering the FCC; is that right?

Mr. MULETA. Yes. I think in order for the FCC to do what I think you are proposing, which is sort of ride herd of all of the stakeholders, I think there would have to be sort of both explicit funding and authority associated with that. So the FCC, in the alternative, has taken on this Coordination Initiative. We have established electronic data bases that have information. So one of Professor Hatfield's recommendations is that we, through some mechanism, become a national clearinghouse of information so that the stakeholders can all keep track of where they are with each other. So we are achieving that. We have the Coordination Initiative in which we brought all the stakeholders and are trying to figure out what have been positive success stories and how those can be translated into places where they haven't been working. So I think the FCC is actually playing in that role, absent explicit authority to ride over—ride herd, as you say, over the various stakeholders.

Mr. UPTON. Mr. Korsmo, explain to me as a consumer, when I send my check in for my service and there is a fee attached for E-911, follow for me where my dollars go because we have the fingers pointing at the PSAPs, at the wireless, the State level. We want the job done. Where is the money going when I write out my check and how is it disbursed to the LECs, to the PSAPs, to the States? How do you do that and how does it vary from State to State?

Mr. KORSMO. I am sure Mr. Melcher can help me on the distribution part of that.

Mr. UPTON. What do we need to do to make sure that all of the money collected goes for the purposes that it was intended, so that we can get to Phase II in every county?

Mr. KORSMO. When we act essentially as a tax collection point for the States, when we put a 911 tax on our bill, that money does not go to us. It is passed through to the States, as any other tax would be passed through to the States. From there the States do various things with it. It really depends, State by State, on the administrative apparatus that has been set up, and what we notice is it depends very much, as I said in my testimony, on the leadership within that State how strong the leadership has been in the public safety interest as to how that money is used. In some States,

that money, for example, is flowed fairly directly to public safety agencies, and in some States, there is even cost recovery given to wireless carriers to incent wireless carriers and give them compensation for deploying E-911 quickly. In other States, that money goes places where frankly it probably is not benefiting E-911.

Mr. UPTON. Mr. Melcher, and I know my time is expiring rapidly here, but is there such a thing as a State by State analysis of what has happened to the dollars collected? So we can look at what has happened at Michigan versus New York versus Florida?

Mr. MELCHER. Yes, sir, we can help you with that. We would be glad to provide that to you in writing, but I believe in all 50 States, we have a breakdown of how the funding is spent. A lot of it is geared toward how it gets to the locals. A good example, in Texas there are two different ways of administering, actually three but one is more local and regional in nature and the other is through the large councils of government. In the State of Texas, people like Mr. Korsmo's company send the money to our State Controller. They distribute the money based on the population to the districts, there are communication districts, like our own, which are regional programs or to the studies that administer their own, but for the Councils of Government Program they are run by the State 911 office and they are subject to legislative appropriation. And in the last two sessions the State has not appropriated that wireless money to those programs. So you have the "haves" and the "have nots" even in one State, but NENA will be glad to give you a breakdown of our observation of funds distribution.

Mr. UPTON. Thank you very much. The next member is going to be Mr. Engel, recognized for 5 minutes.

Mr. ENGEL. Thank you, Mr. Chairman.

And the testimony has been very, very good. I want to start asking the questions of the two people on the panel that sound like me from New York. Let me start with Mr. Amarosa. You spent 24 years with the NYPD?

Mr. AMAROSA. That is correct.

Mr. ENGEL. And that is quite an accomplishment in itself, and I realize that you are now on the outside, but I would like you to comment, if you can from your own perspective, as to why the NYPD is so far behind in deploying technology for E-911.

As I mentioned in my opening statement, according to NENA, there is not one PSAP in the Bronx equipped to handle a wireless 911 call. I think you have a unique perspective on that and I am wondering—

Mr. AMAROSA. It is difficult to say. I have been away from it for over 5½ years, and I think what you have to look at is how they are equipped to handle the information once it came in. They have been working very hard to try to get their CAD system, the computer aided dispatch, up to speed in order to actually get that information and allow it to be blown into the system directly. They have been working with the wireless carriers to have location technology available in New York City. At this point in time, and only up until recently as you know, the 70 cent surcharge that was collected did not come to the city of New York. And that is something that we have been fighting for a lot of years. So part of it became a funding issue. A lot of that was sent upstate of that 70, and only recently

was there any money added on for the city. So I think it is a combination of issues that have occurred. Some of it is the plant equipment that they have, the customer premise equipment I should say that they have. Some of it, I think, is the ability of funding in order to do that because the surcharge, the 35 cent surcharge that was instituted back in the early 1990's to fund the 911 system that we have today, was strictly to maintain the wireless system as it is today without the E-911 component added on at that point in time.

So it is a funding, it is an equipment issue. I think they have their arms around it. From what I have been told today, they do have their arms around it. They are working with the local exchange carrier. They are working with the wireless companies that are in New York City to bring this forward, and I think you are going to see it very, very shortly.

Mr. ENGEL. Thank you. I appreciate the answer because you really answered even the follow-up question that I had in mind about what is happening today; so I thank you for that.

Let me turn to the other New Yorker, Mr. O'Connor. And in Professor Hatfield's report he found that LECs are an integral part of the E-911 equation but that there remain technical hurdles to integrate wireline and wireless systems. Verizon, obviously, is a very large provider of both services. So could you just tell us, enhance a little bit, what has your company done to overcome these technical hurdles? I know you touched on it in your testimony.

Mr. O'CONNOR. Yes, I did Mr. Congressman. Fundamentally, it is actually creating an—it is an IT team that understands exactly how the data bases and the links work between the mobile carrier switch, the selective router that the LEC has, the links between those selective routers in the PSAP locations, and then the back-door channel for the location technology, which goes from the mobile switch to generally a third-party provider, and then from the third-party provider through the data bases and into the PSAP. So that the PSAP position, the dispatcher, gets a married set of information that shows a telephone number, and it shows a location, either an address or in the case of Phase II, a latitude and longitude. So in the Verizon companies, we devoted a whole team to that expertise and used that team, Boston-located team with a very different accent than I have, and sent them around the country. So that when a PSAP begins to think of the process how would I upgrade, we will go there and we will help them understand all the piece parts.

This is what you need to do to your customer premise equipment. This is what the mobile carriers are going to need to do. Here is how it would work. And that coordination role has served us well.

Mr. ENGEL. Thank you. I am wondering, Mr. Hatfield if you have any comment on that?

Mr. HATFIELD. I think it is important to draw a distinction between the technology that is employed today and the steps that need to be taken to make it work today and some of the longer-term issues. As I expressed in my report, I am concerned with the ability of the current system to scale. I think John Melcher essentially said the same thing. A lot of the stuff, unfortunately, is still analog equipment in a digital world. So as I said in my report, I think it is a real compliment to the engineers, and so forth, that



have developed the system that we have, but I am worried long-term whether it can scale and evolve into what we need to provide—meet the requirements in the future.

Mr. ENGEL. Thank you.

Mr. Melcher, would you agree with that and could you also comment since I mentioned before my question to Mr. Amarosa that NENA had stated that there is not one PSAP in the Bronx equipped to handle a wireless 911 call?

Mr. MELCHER. I think the sheer volume of technology that is out there now that has to be either replaced or upgraded, or even in some cases the amount of equipment needs to be reduced, is a huge challenge. As Mr. O'Connor mentioned, a lot of the times the public safety folks look to the local exchange carrier as their system integrator. They may not be possessed of the technical skills or the coordinating skills, and they look to their vendor to handle that for them. There has been only recent regulatory relief, and there needs to be some more regulatory relief to get rid of so many of these switches. We don't need 800 to do the job, but also it is the interfaces amongst carriers. It has taken a while to get some of these interface issues resolved, and we are still working on some of those through our partnership with ATIS and the standards community. I think what you will find, though, is if we can accelerate deployment and it is going to require some seed money—we are not talking a huge delta here, but our findings are that we think this is going to be somewhere between an \$8 to \$10 billion-issue over the next 5 years, but before you gasp and grab your chest, we are trying to figure out exactly how much money is being raised today, and so we don't think the delta that is going to be that huge, but if we can get some a little bit of congressional input, some seed money out there, I think you will see the models develop that can be quickly replicated successfully throughout the country, and we are looking at a much more short-term resolution as opposed to long-term.

Mr. ENGEL. Thank you, Mr. Chairman. He has been very generous with my time and I thank him for that.

Mr. UPTON. Thank you, Mr. Engel.

Mr. Shimkus.

Mr. SHIMKUS. Thank you, Mr. Chairman. I am going to take the liberty of quoting a letter that Mr. Addington wrote, actually to Bob Goodlatte. I am not going to submit it for the record because I haven't gotten any of these guys' permission to do that.

Mr. Amarosa, I am not trying to put you on the spot, but this is just what he writes. "Unfortunately, technology has not kept up with our business plans." He goes at great length of how they are trying to make this rollout. "Both network solution providers that I am aware of, TruePosition and Grayson, have been and continue to be unable to offer a solution for our Motorola network platform, and I have been trying to obtain a solution for over a year."

The question is not to you, Mr. Amarosa. But, Mr. Hatfield, did you encounter much of anecdotal evidence and that is what this is, about these types of problems during your inquiry?

Mr. HATFIELD. I am sorry. I am a little confused about the context. What technology is this referring to? What area interface?

Mr. SHIMKUS. Well, they have the Motorola platform, and they are trying to get the location device. They are having difficulty. And the question really pertains to the ability to have available technology to do this rollout and really the issue of vendors.

Mr. HATFIELD. I assume that this relates probably to some of the technology that is being phased out. I assume either analog or TDMA technology that is being phased out and there may not be readily available technological solutions from some of the rural carriers. I would guess that that is the context.

Mr. SHIMKUS. Let me then actually move this to Mr. Callahan, who is a rural provider, and have his comments on this or other hurdles, especially on the vendor issue first and then anything else.

Mr. CALLAHAN. Certainly on the vendor issue, basically we have experienced and a lot of our RCA members what you are basically alluding to there, is that the vendors are not willing to commit in writing that they can meet the FCC accuracy standards when you have only a rural market.

When you have many cell sites that are border cell sites, when you have a small market, you are not able to triangulate which the network solutions are generally based on triangulation. So first off, I would tell you what I believe the gentleman from your area has experienced is an unwillingness from the network solution providers to actually sign a contract and say that it will meet those needs. I believe that is where he currently is, based on conversations I have personally had with him.

As far as other issues there, relative to rural if you don't mind—

Mr. SHIMKUS. Yes.

Mr. CALLAHAN. I would just comment the realities are 300 meters or 1,000 feet. Right here in Washington, DC that is a very large measure, if you will, because somebody could be on the tenth floor, ten blocks away, how are you going to find them? You just don't have those situations in a rural environment. And I am not prepared to say what the standards should be. I am simply saying the standards could be possibly relaxed to the point that the technology that is out there was usable. We may have a more workable solution, although we would still have many cost hurdles. Because today, in order to accomplish this, we would simply have to remove cell sites to legally meet the mandates of the FCC, as we understand the technology from the vendors.

Mr. SHIMKUS. And that is the benefit of having them here, so they can hear some of these concerns. I know that he also addresses the whole issue of a string of pearls, where because of rural areas, you want to place the cell sites along a major road. You don't get the benefit of triangulation, and this is all at a cost.

Mr. Amarosa, I am going to give you a chance to respond but because cost is such a big issue in this for all the different aspects, whether the PSAP has the money to make the application or whether the cellular company is ready to provide the information, I really want our friends at the FCC—and I understand how local number portability has evolved. It has evolved through a regulatory body interpreting the Telecom Act, which I wasn't a member when it was passed. I am not sure that the members here, that that was part of their intent; however, you have been somewhat

successful in defending that in court; so it is coming, and I don't think any of us has problems with it coming. The problem we have is we have tremendous capital constraints right now to meet all the requirements from all the folks who want to implement enhanced 911. And before we try to take some legislative action, we are really in essence asking the FCC to help us before we have to try to move legislation on delaying the November deadline because we have got to set priorities. And do we want to have enhanced 911 ubiquitously across the country, or do we want to have local number portability? What is the real priority that we should establish? And I would think the FCC would want to establish enhanced 911 for safety issues.

So please carry that back just because in the quote, we talk about TruePosition. And let me just say, before I give you a chance to respond, that what I found is being Chairman of the Enhanced-911 Caucus is that at first there are a lot of people who want to point the finger and blame different groups. The reality is different areas of the country are at different positions and different times, and we are just trying to get everybody to work together to get this to happen. So had he not mentioned you, I wouldn't have mentioned it, but I wanted to quote it accurately. So Mr. Amarosa, if you want to give any response as far as the vendor issue with my friend from my district, Mr. Addington.

Mr. AMAROSA. Sure. We have been working with Terry Addington and with the RCA group on this for quite a while. As you come across the country, there are some switches that are non-standardized. The marketplace has changed in some respects. Where we used to use control channel capability to do location, where now it is voice channel that is being used in some of the voice channel capability is not adaptable to a particular switch. So we are working with Mr. Addington's particular manufacturer, switch manufacturer, at this point to try to overcome that problem so that there is a plan that is out there to try to address this. Whether that is going to come to fruition or not I can't tell you, but it is not for a lack of effort by all of the parties, and not just TruePosition but all of the parties that are involved in this effort.

So it is something that we are on top of, and we have been working with them for a while.

Mr. SHIMKUS. I thank you, and it just brings up another hurdle that we have in moving this forward.

Mr. Chairman, of course you were very kind with my time also, and I thank you and yield back.

Mr. UPTON. Thank you. Mr. Towns.

Mr. TOWNS. Thank you, Mr. Chairman. I guess I would direct this to Mr. Melcher and Mr. Hatfield. A number of States including my home State, New York, have taken funds collected for E-911 deployment and used them for other purposes. How has this affected E-911, and should the Congress act to prevent this kind of stuff from happening?

Mr. MELCHER. Well, I think that as you probably well know, Congressman, that that is almost a loaded question but it is—

Mr. TOWNS. Almost.

Mr. MELCHER. It is truly a terrible situation when technology is available and funding is not. And this is really not rocket science

anymore. A few years ago when we were talking about this before this very committee, some questions still remained to be answered about technology.

Now, technology is not the issue. It is really a matter of political will and of funding, and where the former exists in earnest, the latter should surely follow.

Unfortunately, I think that the temptation in recent economic times has been overwhelming for some of these legislative bodies. And they have seen this bank account built up over the years to prepare for the availability of this technology and the PSAP community may or may not have been completely ready, and so they took the funds and used them for other purposes.

Obviously, being a public servant whose life is charged with saving lives, I find this to be reprehensible. But I also understand the political realities in tough economic times. I think the true answer to your question is what I think this body is trying to do, establish and affirm that 911 must be our top priority.

We have many demands on us today. And the telecom industry has a lot of mandates and regulations. Public safety has all kinds of constraints and new trials and tribulations. But I think the establishment and the affirmation and the enforcement of 911 as being a top priority is truly the answer to the dilemma that you describe.

Mr. TOWNS. Thank you. Mr. Hatfield.

Mr. HATFIELD. I would just echo, I think, basically what John says. I think it is a little difficulty—I'd have a little difficulty saying that I would apply my judgment over the judgment of locally democratically elected people in making decisions of how revenues should be allocated and for what purposes. But having said that, I think it is very clear to me that the public is being misled when they see the item on their bill thinking it is going to one purpose and being used for something else. So that really does trouble me and offends me, quite candidly.

Mr. TOWNS. Let me just follow up on that. You know, some folks are saying that the States should establish a trust fund or the Federal Government should do it. You know, what is your reaction to that? Because I agree with you. I mean, if it's indicated that this should go for a purpose, then it should go for that.

Mr. HATFIELD. I probably should back up a little bit here.

See, I think most economists would argue that it would be better to support the sort of thing through a broader-based, broader-based tax revenues, so that you don't distort prices in the marketplace. So I would start with that. I think that's probably the preferable solution. But having said that, if the second best solution then is, I think, the sort of surcharge that you are talking about, and I think you can tell from the tone of my testimony that I feel that 911 is a very, very vital service to the public and probably increasingly so going forward. And therefore, I would support the second best solution which is a fund of some sort dedicated to that purpose.

Mr. TOWNS. Mr. Melcher.

Mr. MELCHER. Actually, I think that that's a good role for the Federal Government to play in making up that difference. We are finding through our survey work that so much of 911 calling, espe-

cially from wireless devices, is not related to your own personal emergency, but you are reporting something that's happening to someone else. In the old days, you know you used to crank the phone and say, Sarah, get me the sheriff in Mayberry. You were reporting on something that personally affected you or a member of your family. Now, there is a great percentage of these calls that are for someone other than yourself. So it really does kind of boil down to a public good as opposed to a personal good. In the beginning it was user pays. If you have got dial tone or its equivalent, you were the user, so you should pay a fee. And these were surcharges, not taxes rather. But in the event that now we have more people benefiting from the service, I think it does warrant some broader look at how it is funded.

But I think if you leave the basic funding mechanisms in place, make sure there are some carrots and some sticks. Most people don't realize that EMS the paramedic program in this country was really started by a DOT effort through NTSA, and they gave seed money out to upgrade ambulances because they used to be just the hearses with the red lights on top, and if you died on the way to the hospital, well, you would make a left instead of a right, and, you know, the provider is still happy. But through seed money out there, they created standards for ambulances, and they created standards for training of paramedics and said, if you actually have the right equipment on board, can we save some lives and let that go for a few years, and they found that they could.

And so we morphed to where we are today, and they said, if you don't have a State program in place that has standards in place for EMS, then we are going to cutoff your highway funds and that got the attention of many Governors who were lagging at the time and some State legislatures. So there are some examples out there about carrots and sticks that allow us to, I think, apply them to today's dilemma.

Mr. TOWNS. Thank you very much, and thank you, Mr. Chairman.

Mr. UPTON. Thank you, Mr. Towns.

Mr. Walden.

Mr. WALDEN. Thank you, Mr. Chairman.

I want to go, I think, to Mr. Callahan on the issue of rural areas and accuracy. Can you detail for me a little more in terms of what the requirements are that you are under? I represent a district larger than any State this side of the Mississippi River, so it is a long way between cell towers. Sometimes that's okay. My cell phone doesn't work, and that can be a relief. But tell me what this means for a rural area?

Mr. CALLAHAN. Are you speaking to the current standards?

Mr. WALDEN. Current standards, the costs that you would face, or a provider would face, to meet the current standards in a rural area.

Mr. CALLAHAN. Well, first off, we are not convinced based on negotiations with the vendors that we can actually meet those standards the way our system is configured today with the coverage we have today.

In our case, where we cover virtually all of the terrain at least with a three-watt analog phone, the only way we think we could

make that 95 percent of the time accuracy within 300 meters, would be literally to pull out cell sites and remove service, and, of course, that's the last thing we want to do. We are local for a reason and that's our advantage.

So we would be, you know, hard pressed to try to meet those requirements because we don't think there is a technical solution. If one were available, we then run across the issue, certainly, of funding and what's the greater good here? For us to roll out a solution would be approximately the same cost of what we will spend per year for the next 4 years rolling out a new technology? So it is the equivalent of the whole year of capital spending putting out a new technology. So it's extremely substantial to us.

Mr. WALDEN. And there is an issue between analog and digital? Or is it just the new standards? Or is it the number of towers you have so you can triangulate the signals?

Mr. CALLAHAN. With a network based solution, which is what would be required for analog or amps, TDMA—GSM, in its current flavor, I don't think has any phones that are able to do anything other than network base. For any network based solution, you are pretty much going to have some form of triangulation to figure out about where that unit is. In our case, we don't think that we are going to be able to get there 95 percent of the time with the technology that's there. I would agree that the technology, as I understand it, can get there if I also served New Orleans and I served my local area, because then I'd have so many subscribers in the New Orleans market and in some of the areas of our market, that we could locate more than 95 percent of the time.

You know, we don't know where the best solution is other than we think we have to keep talking about either relaxing the standards or looking technically at certain cell sites, possibly, which is just an idea that just kind of popped in my head just now. But, you know, looking at specific cell sites and determining those cell sites would not be able to meet those requirements and maybe that would be a way around it for rural areas or those standards for those cell sites could be relaxed. Somewhere along those lines, we should be able to meet.

Mr. WALDEN. Well, I have to think my constituents would rather have you come close than not be there at all. Isn't that really what you are telling me, is that you can't afford to be there if you have to meet these standards, so you might have to just pull service?

Mr. CALLAHAN. Absolutely. Basically, as I testified, basic 911 service in many of the communities where we serve and even more communities in many of our brethren RCA companies would be effected to the point that they will definitely be pulling back service, and there will be no service in those areas.

So you won't get a basic 911 call off. It just seems ludicrous that the rules would basically force us into pulling sites back, but as we understand the way they would work today, for us to be in compliance, we would have to do that.

Mr. WALDEN. And is that something the FCC then is going to enforce?

Mr. CALLAHAN. That is my understanding.

Mr. WALDEN. Can you address how this will work in a rural area?

Mr. MULETA. Yes. We are, first of all, we have extended timelines for mid and small-sized carriers, rural carriers, in terms of their implementation of this technology. I think what we are also looking at is based on our continuing dialog with our carriers, such as Mr. Callahan's, is to try and think through these issues and trying to manage the issue of as you said, you know, having something that is available, but maybe not as strict, versus not having it at all.

So we are very concerned with this issue, and we are looking into it and trying to find appropriate solutions. We are also working with new vendors that are coming in, having technology more specific to those markets.

Mr. WALDEN. Okay. Because I really wouldn't say that—I understand why you need to know which building in a city and how you have all these cell towers and you can do all that, but I am telling you, you get out in a district like mine or in Montana or in Wyoming, you may go an hour before you see another vehicle, and so I hope you will be understanding one size isn't going to fit every shoe, and yet we want to get there with the 911. I guess I sat here listening to the funding issue knowing my State had a fund of \$10 million that they are now going to do something else with, and they have got enormous budgets problems, and I respect their local decisionmaking authority. But are you telling me that on the bill it says 911 tax, that that is what it says, and they are collecting it for—well, how are they not committing mail fraud then by sending out a bill saying here is what you are paying? Because that's what I get asked when I go out there. What are all these fees and things I am paying for? And I say, well, that's paying 911 and this is that. How is that not simply mail fraud? Because if I send out a letter that says I am collecting money for one purpose and use it for another, aren't you I—I mean, not that I do that, but isn't that mail fraud? Don't you be looking at all those letters Mr. Markey, but no, I mean, seriously. We have got to quit perpetrating frauds on taxpayers. It's no wonder none of us has any credibility. Government does this all the time, and yet it's your companies that have them on your bills mandated, I assume, by some level of government. And so I know Mr. Markey has a lot of credibility personally. I heard that. But you know what I am saying. We used to have a dollar tax on tires to get rid of the surplus tires that were being recycled. And when the Department of Environmental Quality told us they were doing that, everybody made a scramble for that buck a tire tax to spend on something else. And I was in a position to say no, and we stopped it because how do you ever restore credibility if you don't do what you say you are going to do? So I ask that rhetorically.

Maybe, Mr. Hatfield, you are the professor outside of the private sector here that maybe tells us how do we get at that? Do we mandate that if you are going to put a 911 tax on a bill, then that can be all it is allowed to be used for?

Mr. HATFIELD. I am not sure that an academic is the appropriate answer to that. It seems that's probably even more—but I agree as I said before. There is sort of a truth in labeling here that seems ought to apply. And I think that's—I am not an academic, I am just sort of a private citizen thing. If there is a line on there that says

one thing, it seems to me that you ought to have some assurance that that's what it's going to go for.

Mr. WALDEN. Yeah. Mr. Callahan.

Mr. CALLAHAN. Yeah. My quick comment to that would be that I agree the way it comes out in the papers for most areas it is fraud. As far as whether or not it is mail fraud, the reason I think it probably isn't mail fraud is I, as a carrier, am charging it and simply passing it through, and I am actually remitting it to a government entity, in my case a local government entity that then—who then, to my knowledge, is actually spending the money properly.

I might add, we don't have that concern, other than we don't have a Phase II funding mechanism. We only have Phase I and that has worked great. We have a great relationship with our PSAPs.

Mr. WALDEN. Yeah, I appreciate that.

Thank you, Mr. Chairman.

I will yield. I have no time to yield back.

Mr. UPTON. Thank you. Mr. Markey.

Mr. MARKEY. Thank you. Now, some people have made references to the wireless local number portability which will allow wireless consumers to switch wireless companies, but retain their same wireless phone number. Now, a lot of consumers, me included, have come to believe that our number is our number. That's our number. If we switch companies, we take our number with us. And I think most people who are watching this believe the same thing, that that's a sacred number. It is my number. And we want the companies to help us to take it with us, no matter where we go throughout our lives. I remember when I was a boy and one of the earliest things your mother did with you is say, in case you ever are in an accident, your number is, for me, MA4-0815. I remember that conversation because I had it over and over again. If you are ever in an accident—and by the way, make sure you change you underwear every day in case you are ever in an accident. You know, and so when I did get run over by a car, and I am up in the emergency room, you know, there is two things. I remember it. My number is MA4-0815 to the doctor. She's on the phone now with the doctor. And the doctor saying, your boy is here, we need permission to operate. And the other thing is, you know, I know I haven't changed my underwear this week, you know what I mean. I am 5 years old and I am a boy. So I have got big problems. And all these thoughts are going through my brain.

Well, there is a lot of wireless carriers who are saying, oh, my God. It is so hard to do E-911 and local portability at the same time. You know. It is like running a wireless network and chewing gum at the same time is so complicated. We don't know if we can do both. You know what I mean. Now, I know at age five, I could keep all of that in my brain. I am operating on these different levels of my phone number, my underwear, you know. My mother will kill me. And all these things are all running through my brain. But many of these companies they have a hard time in thinking in terms of multi-tasking, you know. So I would point out that, right now, there are absolutely no implementation problems when it comes to their billing operations, these conditions. Many wireless



companies have already implemented a process which today has millions of consumers already paying monthly fees for both E-911 and for the wireless portability capacity, neither of which, in many instances, exist. But the billing system is up and it is modern, it is technologically perfect, and I am sure there is some person that is moving right up the corporate ranks in each company that's keeping that billing system up with the modern information technology.

So that means, over the course of this year, the consumers will be paying hundreds of millions of dollars for wireless number portability to certain wireless carriers, even as some of those carriers lobby Congress and the FCC for yet another delay. One estimate I saw put the number at almost \$2 billion that would be collected from consumers as an extra fee over a 12-month period.

So I appreciate that both E-911 and wireless number portability costs money, and I know that some carriers are fearful of the repercussions to their companies bottom line if consumers are finally permitted to keep their phone numbers while shopping around for better service or lower rates. But public safety and consumer protection are not competing goals. They are not alternatives, choose one or the other for the wireless companies. And I think many consumers resent hearing that a wireless carriers has the temerity, while collecting hundreds of millions of dollars in fees to even suggest to policymakers that they should choose between public safety and consumer protection. I don't want to see E-911 fees diverted by States. I also don't want wireless local and number and portability fees diverted to a carrier's general revenue with consumers never seeing the benefit. That's not right. And I expect the FCC to uphold the public interest and see that both E-911 and wireless local number portability are implemented on schedule.

So I have a brief question for Mr. Hatfield. In your recommendations, Mr. Hatfield, you have suggested the creation of a national E-911 program office as part of the Homeland Security Department. Recognizing that E-911 is something that States and localities implement, could you expand on what role you believe a Federal national office could play in this area? Is it as a clearing house of information, as an advocate within the Federal Government for greater funding for first responders and public safety needs? Or some combination of all of these functions?

Mr. HATFIELD. I think all of the things that you mentioned are possible, and I want to make it clear. When I was talking about earlier, I was reflecting here sort of the classic separation of powers issue, the commission has certain powers and authorities, and I think what the commission is doing with this latest coordination effort and so forth, things that John talked about are all wonderful steps. But it seems to me that there is an executive branch responsibility here because of the nature of this in terms of the—of national defense and security and so forth. So it was in leadership in that role, the Federal Government leadership in that role that I was talking to. And that includes funding in support for some of these, like the advisory committee that looks at this from a bigger standpoint, from a more national standpoint that I was referring to in my report. And as I said, I am still very much in favor of something like that, whether it is housed in the Department of

Homeland Security or something is a little bit hard for me to say being such a distance from Washington now.

Mr. MARKEY. Thank you very much. And please, at the FCC, do what you can with these wireless carriers, you know, because you know, it is a sad state of affairs when they are pleading technological incompetence. I mean you just hate to hear it at this advanced stage of the industry. So whatever you can do we would appreciate it.

Thank you Mr. Chairman.

Mr. UPTON. Thank you, Mr. Markey. I want to thank all of the panelists for your testimony your responses. Again, I remind you that some members may actually submit some questions in writing. We are looking forward, Mr. Melcher, to getting the information back on a timely basis. And I just want to, again, reconfirm the importance of this technology going forward, and us all working together on the same page so that when someone makes a call, whether they be in the rural part of Oregon or Michigan or I don't know if they have any rural parts in Massachusetts, maybe in the big dig. Is that still rural? Anybody using that yet?

Mr. MARKEY. I know it sounds hard to believe that 50 percent of Massachusetts is trees, but after you get outside of Boston, as anyone who has been there knows, it is a long ride to New York City. And just as surprising to people, that's why we have Berkshire Day at Finley park and a Maine Day at Finley park because everyone feels like it is a long ride in from this otherwise, you know, tree enshrouded world in which we live in New England.

Mr. UPTON. Well, we want this done so that when people punch that number, they know that help is the on the way.

Mr. MARKEY. Can I say this though? Although I will admit that the only relationship to rural America that we have in my district are the three stuffed cows in front of the Hilltop Steak House on Route 1, okay. So I do admit that in the urban area, it is not that—excuse me.

Mr. UPTON. Is that why you supported the dairy subsidies?

Mr. MARKEY. Can I tell you the truth about those dairy subsidies? My father was a milkman for the Hood Milk Company. So we were always at the retail end of the milk chain, okay? And my father, privately, while working for the Hood Milk Company, was always pointing out how the price of milk to our family would be much higher if he didn't get, as my mother always said to us, the special discount that your father gets for being a milkman for the Hood Milk Company. But he would always be pointing out how much the price of milk is for everybody else in the neighborhood than it should be, although since we worked for the Hood Milk Company and our income came from the Hood Milk Company, we were all bound by the code of Omanta on this subject. Okay. So I will admit that having a great deal of knowledge about this subject, but the retail perspective on those dairy subsidies is a lot different from, I guess, your perspective on them. And that's why I think David Stockman came out against dairy subsidies back in 1981. But his mother, a dairy farmer, advised him that it was probably a big mistake for him.

Mr. UPTON. Yeah. They still have their barn.

Mr. MARKEY. They have the barn and the dairy subsidy.

Mr. UPTON. No. But they don't have—the dairy subsidies went down so they don't have the cows anymore.

Mr. MARKEY. Aw.

Mr. UPTON. But when we punch in that number, we want to make sure that our first responders get there as well because they care about all the people that they serve, just like the milkmen do.

Appreciate all of you. We are now formally adjourned.

[Whereupon, at 12:29 p.m., the subcommittee was adjourned.]

