WIRELESS ENHANCED 911 SERVICES

HEARING

BEFORE THE

SUBCOMMITTEE ON TELECOMMUNICATIONS, TRADE, AND CONSUMER PROTECTION

OF THE

COMMITTEE ON COMMERCE
HOUSE OF REPRESENTATIVES

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CONTENTS

	Page
Testimony of:	
Bibb, David, Deputy Associate Administrator, Office of Real Property, Office of Governmentwide Policy, General Services Administration	62
Danner, Hon. Pat, a Representative in Congress from the State of Missouri	3
Daub, Hon. Hal, Mayor of Omaha	20
Galvin, Hon. Denis P., Deputy Director, National Park Service	60
Hargarten, Steven, Director, University of Wisconsin Medical Center	31
Heinrichs, George, President and CEO, SCC Communications Corporation	33
Hoyt, K. Susan, Chairperson, ComCARE Alliance	8
Martinez, Hon. Ricardo, Administrator, National Highway Traffic Safety Administration	26
Miller, S. Robert, Chair, Regulatory Committee, National Emergency Number Association	36
Trout, Edward R., Chairman, American Trucking Association, Inc	41
Wheeler, Thomas E., President, Cellular Telecommunications Industry Association	64
Material submitted for the record by:	
McDade, Hon. Joseph M., a Representative in Congress from the State of Pennsylvania, letter dated March 23, 1998, to Hon. W.J. (Billy) Tauzin	82

WIRELESS ENHANCED 911 SERVICES

TUESDAY, MARCH 24, 1998

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON TELECOMMUNICATIONS,
TRADE, AND CONSUMER PROTECTION,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:10 p.m., in room 2123, Rayburn House Office Building, Hon. W.J. "Billy" Tauzin, (chairman) presiding.

Members present: Representatives Tauzin, Oxley, Gillmor, White, Shimkus, Markey, Sawyer, and Green.

Staff present: Justin Lilley, majority counsel; John Morabito, majority counsel; and Andy Levin, minority counsel.

Mr. TAUZIN. The committee will please come to order.

Let me wish you all good afternoon first, and the purpose of today's hearing is to discuss how advanced communications can be used to save lives. The subcommittee often discusses telecommunications policy that touches American lives every day, but the subject we are about to address today can literally mean the difference between life and death.

Often in the subcommittee we refer to individuals as ratepayers or taxpayers or consumers, but today we are talking about friends and relatives. It's about finding faster ways to respond to life-threatening emergencies and thus reduce the severity of those injuries. In short, the hearing is about using advanced technology to help people in very tangible ways which may, in fact, in some cases save lives or reduce the threat of long-term injury. It's ultimately about using the best telecommunications infrastructure in the world to bring emergency services more quickly to those who need it.

Regardless of whether we call in from home or on the road, and regardless of whether we're traveling in the cities or in rural America, or traveling up and down a bayou in south Louisiana, when we place a 9-1-1 it better go through. Sadly, sometimes the call doesn't go through.

Last month The Washington Post reported on the dead zone, areas in which there is no wireless service in Rock Creek Parkway, here in the Nation's Capital. Wireless industry figures state that roughly 3,000 calls per month are interrupted in Rock Creek Park.

What are the safety implications of these dead zones, of the thousands of people who use this one park alone, every day? Will calls to 9-1-1 from Rock Creek Park ever get through, and why do these dead zones exist, and how can Congress help to eliminate them?

Congress has already adopted a number of bills over the past 5 years that have stimulated the build-out of new facilities and has dramatically increased the coverage area of wireless service providers. Similarly the FCC has adopted rules that help emergency services personally locate a caller, but more needs to be done, however.

We need to establish and maintain a comprehensive wireless end-to-end communication system, one that links members of the public emergency service providers, emergency dispatch operators, public safety officials, and trauma care facilities.

We need to find ways to ensure that if someone is seriously injured, if treated by a doctor within that golden hour, that critical time when in fact a life can be saved—every second that ticks away from the time an accident occurs decreases, we know, the victim's chance of survival.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. TOM BLILEY, CHAIRMAN, COMMITTEE ON COMMERCE

Thank you Mr. Chairman for holding this hearing today on wireless enhanced 9-1-1 matters. I would also like to thank Chairman McCain and Representative Danner for testifying this morning.

There are currently 52 million wireless subscribers in the United States and demand for wireless services continues to grow. One reason for the significant growth is that more and more subscribers are purchasing wireless telephones for public safety reasons. Whether we are traveling with our children or grandchildren, or traveling on unfamiliar roads, many Americans have found comfort in knowing that in the case of an emergency they could make a telephone call to reach a close relative or police. As a result, we know that more than 60,000 Americans make calls from wireless handsets every day for emergency reasons.

In order for a successful emergency call to be made, however, wireless communications facilities and services must be available in all parts of the country. Public Safety Answering Points also must be established or upgraded by State and local governments so that calls can be routed to the relevant police, fire, and health emergency response providers. An effective end-to-end communications system is absolutely necessary to enhance public safety.

At this hearing I hope to learn more about how we can facilitate the deployment of a seamless wireless communications network. Many of the issues that will be discussed have already been recently addressed by Congress. In particular, the Telecommunications Act of 1996 adopted several measures to help wireless service providers deploy new facilities on federal lands. Congress also has attempted to delicately balance the needs of wireless service providers with the rights of local governments over zoning issues.

To the extent that barriers to an effective wireless end-to-end communications system do exist. I hope that we can explore ways to remove such barriers so that emergency care professionals can be more effective in their jobs—protecting property, reducing crimes, and saving lives.

Thank you Mr. Chairman.

PREPARED STATEMENT OF HON. MICHAEL G. OXLEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Thank you, Mr. Chairman. I commend you for holding today's hearing on enhanced 911 services. This is an important issue for the public's safety and I look forward to an informative discussion.

The dramatic rise in the use of wireless services provides a tremendous opportunity for Congress to further provide for the public's safety. As my colleagues know, I believe that protecting the well-being of our constituents is one of the most important responsibilities we hold as Members of Congress. As this wireless technology becomes more and more common in the marketplace, it seems we have a real opportunity to make a difference in the lives of Americans.

I look forward to the comments of today's panelists as we consider how best to serve the public good. In particular, I anticipate addressing the placement of facilities used by wireless service providers.

Given the rural nature of my district, a large number of towers will likely need to be placed to effectively provide wireless coverage. While Congress broadly addressed this eventuality in Section 704 of the Telecommunications Act, I am anxious to have an update on the implementation of our intentions.

Again, I thank the Chairman for addressing enhanced 911 services. I yield back the balance of my time.

PREPARED STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Thank you Mr. Chairman for holding this important and educational hearing on Wireless Enhanced 911 Services. Hopefully, we can all learn a little bit more on what we can do to facilitate the increase and enhancement of emergency services through wireless technologies.

Today we have seen an impressive growth in wireless technologies. This technology has numerous advantages and uses. Wireless technologies have made it easier for people to stay in touch with their families and work, it has made it easier to report crimes, and it has improved the response time to accidents for emergency services.

An enhanced wireless 911 service is vital to increasing the response time of our emergency care professionals. With new technology and an end-to-end network of wireless facilities we can hopefully build on our current success.

Again, I look forward to this hearing, and hopefully it will shed some important insight on how we can better serve our country through innovative technology and also better prepare our emergency care professionals.

Again, thank you Mr. Chairman for holding this important hearing.

Mr. TAUZIN. We're fortunate to have an excellent group of panelists to discuss this issue and to find ways to help us facilitate the formative end-to-end communications systems. I particularly would like to welcome my dear friend Representative Pat Danner, a former colleague of mine in the Blue Dogs when I was on that side of the aisle, from the great State of Missouri.

Ms. Danner and our other panelists will be able to shed some light on the seriousness of these matters, and we will this morning—this afternoon, rather—also in a tutorial fashion, demonstrate in fact how emergency care can be immensely helped with end-to-end wireless communication.

So I am pleased now to welcome as our first presenter, the Honorable Pat Danner, representative from the State of Missouri, with our fond thanks for being here, Pat, and for your excellent attention and contributions to this issue.

Pat, your statement of course is a matter of the record. We'd appreciate your opening statement.

STATEMENT OF HON. PAT DANNER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Ms. DANNER. Thank you very much, and I do have a statement I will present for the record and will paraphrase that for you gentlemen.

Last Thanksgiving day was a very special day. I think we all remember our Thanksgiving day very fondly, but it was not a good day for some people. A couple from the State of Kansas, my neighboring State, were traveling south on Highway 71 when they observed a van in front of them driving erratically, mileage up to 80 to 90 miles per hour, off on the shoulder, off on the center line.

They had a cellular phone in their car and began making a series of telephone calls. Their first phone call was to the Highway Patrol, the Missouri Highway Patrol, and somehow or another they got a

number that said it would be a collect call, and so she decided not to pursue that.

She then dialed 9-1-1, and since they were in southwestern Missouri she got Joplin Police Department, but even dialing 9-1-1 a recorded message came on after 7 or 8 phone calls, telling her to redial. She dialed again, and it turned out she'd gotten an administrative number, and nothing happened that time.

She then tried Niosho, Missouri, and dialed that number. It did get through to the Niosho Police, and by that time—and by the time—and by the time they were able to set up the roadblock that van had crossed the line, hit an oncoming vehicle containing a 22 year-old mother and her 2 year-old child, the child appropriately in a car seat in the back seat of the car.

It killed the mother instantly. The child was taken to the hospital. The couple from Kansas were distraught. You see, they didn't know what Missouri's number was. They didn't know to dial *55—not too strange since it has not one but two numbers that one dials if they want road assistance. Indeed, if one were to travel from my State of Missouri to Washington, DC, one would encounter six different numbers that one would need to know. And of course as we leave Washington and go into Maryland or into Virginia the numbers are different as well.

There were many concerns about this. The couple, who had observed the accident in the making and indeed the accident after it happened, after spending their weekend, stopped by the hospital to see the little 2-year old boy for whom they had stopped and bought a Tickle-Me Elmo doll, only to find out that he had perished as well.

So it was a loss of three lives because they couldn't access help quickly enough. They have offered to come to Washington to testify, but that of course would be a tremendous expense to them, and so I want you to know that they feel so strongly about this, as did many of the people in the Kansas City area. There were many phone calls to television and radio stations about this and certainly in the newspaper as well.

I contacted the couple personally and told them that 8 months prior to that Thanksgiving accident I had filed legislation asking for help in this regard, and the bill specifically is designed to promote a comprehensive program to assist States in adopting a nationwide emergency telephone number for cellular telephone users.

This, it is my understanding, is a program that has the support of the National Highway Traffic Safety Administration, the Federal Communications Commission, and the Cellular Telecommunications Industry Association. And I am pleased to read in the Kansas City Star an article that technology will allow authorities to pinpoint the location of a cellular phone user within 125 meters by the year 2001.

So I think that as more and more of us do have our cellular phones, and we want to use them to save lives, to avert accidents. I can recall fairly recently, doing *55 in my State of Missouri, on a late night return from an event, to tell them that on I-29, Interstate 29, there was a herd of black angus cattle; and black angus cattle at night on an interstate, that's not a good combination.

That concludes my statement, gentlemen. I understand that you all have business, and I will tell you that we are about to mark up ISTEA. So I will take my leave whenever I have responded to any questions that you may have of me.

[The prepared statement of Hon. Pat Danner follows:]

PREPARED STATEMENT OF HON. PAT DANNER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Mr. Chairman, members of the Committee. I thank you for the opportunity to testify at this hearing.

Wireless technology, specifically cellular telephones, help simplify, or perhaps complicate our lives, but one important aspect cellular telephones contribute to our lifestyle is that of safety in a variety of ways, but today I would like to concentrate on highway safety.

May I share with you a true story that demonstrates the current limits of wireless phone service and inform you of a bill I have introduced that could remove one obstacle to the effective use of cellular telephones in emergency situations.

Last year, on Thanksgiving Day, a couple from Lenexa, Kansas was driving on U.S. 71 in Southwestern Missouri. This couple, Greg and Luann Bertaux, observed a minivan weaving through traffic, driving at erratic speed, and crossing both the road's shoulder and its center line. Using a cellular phone, Luann tried to reach assistance. However, because she was not aware that the cellular emergency number in Missouri is *55, she was unable to reach assistance quickly.

After attempting several different numbers, she was finally able to reach an operator who connected her to a local police station. However, by that time, it was too late. As the police were beginning to erect a roadblock, the minivan collided with an oncoming vehicle, resulting in the death of three people, including a two year old child and his 22 year-old mother. This tragic accident might have been avoided if Mrs. Bertaux had been able to reach authorities on her first attempt.

It is troubling that this tragic situation could occur almost anywhere in the nation. In fact, if a motorist were to travel from the 6th Congressional District of Missouri to Washington D.C. on I-70, the traveler would have to know to dial *55 in Missouri, *999 in Illinois, 911 in Indiana, *DUI in Ohio, 911 in Pennsylvania and *77 in Maryland. In other words, the 6 states between Kansas City and Washington, D.C. have 5 different cellular assistance numbers. Further, in the United States as a whole, there are as many as 15 different cellular assistance numbers. Some states actually have two cellular emergency numbers: in Kansas, for instance, a motorist on the Kansas Turnpike would dial *KTA, but would have to dial *47 from all other roadways. The system simply should not be so convoluted.

In March, I introduced legislation, H.R. 1011, that would standardize states' cellular emergency numbers. I am pleased that both the Department of Transportation and the Cellular Telecommunications Industry Association have expressed interest in my effort and I am hopeful that H.R. 1011 will provide the necessary Congressional impetus for prompt action. This unfortunate incident serves as a cogent reminder of the need for this life saving legislation.

Besides reporting aggressive or impaired drivers, cellular phones may also be used to summon help when a vehicle is disabled. Such action could reduce pedestrian deaths on the Interstate System—one-third of which involve stranded motorists who leave their vehicles to seek assistance. Providing motorists nationwide with a single, reliable cellular phone number helps to ensure that the highway system is as safe as possible.

Today, our nation relies on interstate travel more than ever. Technology has made such travel much safer through advancements in mobile communications. However, it is vitally important to ensure that technological advancements are utilized in the best manner possible. Combining the growing use of cellular technology with a national standard is an important step in this direction.

Mr. Chairman, I know that, under your leadership, this subcommittee has been actively involved in efforts to ensure the effective and efficient use of cellular technology. I want to thank you again for this opportunity to testify and I look forward to working with you to address this important public safety concern.

Mr. TAUZIN. Well, Pat, let me first thank you for again your extraordinary interest and concern in this area. It's precisely because of the incident like the one you presented to us today that our committee is meeting.

We are not out to regulate anybody into doing anything differently other than to facilitate the advance of this technology so that people can in fact have the advantages of early assistance in those kinds of tragic circumstances; and also, as you point out, to avoid something as dangerous as black angus cattle on the highway from causing someone to lose their life.

Ms. DANNER. Well, we know, too, Mr. Chairman, that statistics have shown, and I know you are aware of this, that one-third of the accidents, pedestrian accidents, on interstates are caused when people leave their vehicle to seek assistance, and therein lies a real problem also.

Mr. TAUZIN. Pat, I know you've got enormous work to do on ISTEA, and we all have an interest in you doing it today, but I wanted now to yield to my friend from Massachusetts who was courteous enough to allow you to present your statement before I recognize him for an opening statement, but to give him a chance to make a statement, and perhaps you want a dialog with him before you do leave the hearing.

Mr. Markey.

Mr. MARKEY. Thank you very much. You know, the only piece of beef that we have, we have a stuffed cow in front of Frank Giufreda Steak House on Route 1 in my district, and that's our only relation to any of those animals.

In fact, there was one story about 6 months ago where the anchorman was so unfamiliar that there was—they showed the video of these two cows—two animals—running around here. They had been released here in Washington, DC out on the highway, and the anchorman thought that it was—the name of the two animals were Black and Gus.

And that shows you how far removed we are from understanding this world in which you live. Although there is one world that we do understand, which is ISTEA, because you are doing great work with the rest of your committee because we are going to be building so many more roads in America that could have emergencies on them, you know, that we should probably pass this bill in tandem with ISTEA because is it 200? How many billions do they have?

Ms. DANNER. Actually, the Senate had, I believe, $214 billion and the House has $217 billion.

Mr. MARKEY. Two hundred and seventeen. That's such great work. Thank you. This is the post-cold war era at its best, you know. This is a peace dividend.

Now we have to have the emergency wireless system put in place in order to ensure that people are safe on these new roads and bridges that we are going to be.

Mr. TAUZIN. The Chair would just like to point out that while folks in your region are not very good at identifying the females of the species, that you are well known for shooting the males.

Mr. MARKEY. Could someone explain the joke to me?

Anyway, there are those who didn't get raised in New York City.

Mr. TAUZIN. The males are called bulls.

Mr. MARKEY. Oh, I see. Anyway, I am going to do my best to help to see your vision come to pass here in the wireless emergency area, and we thank you so much for the work that you're doing. Thank you.

Ms. DANNER. I thank both of you very much. Thank you, gentlemen.

Mr. TAUZIN. Thank you very much, Pat, and the Chair will for an opening statement recognize the gentleman from Massachusetts.

Mr. MARKEY. I'd just to like to insert my statement in the record. We've grown from 15 million Americans using wireless telephones 5 years ago to over 50 million Americans today. Competition in the wireless industry takes root increasingly, and prices are coming down, and service quality improving. The demands for wireless phones is becoming insatiable in our country.

The dream of many wireless visionaries is taking shape as wireless telephones are seen less and less as an ancillary product for the wealthy or the business community and more and more as a technology that is seeing its democratization as a broad-based consumer product.

As any industry evolves and matures it is important for policymakers to take note of emergency public policy issues that have to be addressed. The fact that we are here today to address issues surrounding wireless access to emergency 9-1-1 services is frankly due to the overwhelming success of wireless technology in the marketplace.

So I am looking forward to your hearing, Mr. Chairman. It's a very exciting and well thought out group of panels which you have put together, and with that I'll yield back the balance of my time.

[The prepared statement of Hon. Edward J. Markey follows:]

PREPARED STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MASSACHUSETTS

Good afternoon. I would like to thank Chairman Tauzin for calling this hearing this afternoon on very important public safety issues affecting the our wireless telecommunication infrastructure. I want to thank all of our witnesses for appearing before the Subcommittee today.

Only 5 years ago, there were only 15 million Americans who utilized wireless telephones. Today that number has grown to over 50 million Americans. As competition in the wireless industry takes root and prices come down and service quality improves, the demand for wireless phones is becoming insatiable. The dream of many wireless visionaries is taking shape as wireless telephones are seen less and less as an ancillary product for the wealthy or the business community and more and more as a technology that is seeing its democratization as a broad-based consumer product.

As any industry evolves and matures it is important for policymakers to take note of emerging public policy issues that have to be addressed. The fact that we are here today to address issues surrounding wireless access to emergency 911 services is frankly due to the overwhelming success of wireless technology in the marketplace. That success means that subscribers are increasingly counting on these wireless technologies to deliver the same, or better, service they have come to expect from traditional wireline telephones.

As part of the FCC's responsibility to promote the safety of life and property, the Commission has adopted rules affecting the wireless industry. One requirement is the utilization of what is referred to as Automatic Location Identification (ALI) technology. The FCC requires that by October 2001, wireless carriers will be expected to be able to identify the location of mobile 911 calls within a radius of 125 meters. This technology, however, is only one piece of the puzzle. It must work in conjunction with Public Service Answering Points (PSAPs) that must be established at the state and local level to handle and coordinate emergency response from fire, police, or public health entities.

I believe that an effective end-to-end telecommunications infrastructure capability must be available to enhance public safety. It is vitally important that the Subcommittee discuss the need for a seamless network that avails emergency care professionals of the ability to protect life and limb and reduce crime. We need to ex-

plore how to remove barriers to enhancing public safety in a manner that balances other public policy goals and the costs of providing these services.

Again, I thank the Chairman of the Subcommittee for calling this important hearing this afternoon and look forward to hearing from our witnesses.

Mr. TAUZIN. Are the other members requesting time for an opening statement? Mr. Green? The gentleman is asking for an unanimous consent to submit written statements. That will be a general, unanimous consent to which there is no objection. So ordered.

Are there any other members who which to make an oral opening statement.

Mr. WHITE. I would have made an opening statement, but I know I can't compete with the wit and humor of the gentleman from Massachusetts and the chairman of the committee, so I think it's probably a better idea not to say anything at the present time. Thank you.

Mr. TAUZIN. Pleased to present Mrs. Sue Hoyt, RN and CEN Chairperson of ComCARE Alliance, for the presentation of a tutorial on the ComCARE Project which is designed in fact to facilitate many of the concerns we've asked to be addressed at this hearing.

Miss Hoyt, we are please to hear you at this point and to see a demonstration.

STATEMENT OF K. SUSAN HOYT, CHAIRPERSON, COMCARE ALLIANCE

Ms. HOYT. Thank you. Chairman Tauzin, members of the committee, I want to thank you this afternoon for inviting me here today. As the immediate past President of the Emergency Nurses Association I have had firsthand experience with some of the types of situations that I will describe to you this afternoon in this brief tutorial.

I have been asked to describe some typical pre-hospital crash situations today and then our vision, what we think is future in the near future. Before I do it, I'd like you to keep some important facts in mind.

First, there are over 57 billion wireless subscribers in the United States. There are 83,000 wireless calls placed to 9-1-1 each and every day, as compare to only 59,000 calls last year. One of the main reasons that people purchase wireless phones is for safety, and over 85 percent of wireless phones purchased today are portable handsets.

Today we know that we all have the components for an effective wireless emergency communications network, connecting these millions of wireless users and emergency personnel. Advanced Emergency Care, "Smart cars," wireless networks and phones—yet each more needs more fuller and fuller development, and currently we all know there are ineffective links between them.

Let me describe for you the situation today. Chairman Tauzin, as you have told some of my colleagues before you, you I know have had firsthand experience with the type of motor vehicle crash that we're talking about.

Imagine, it's mid-afternoon in rural Louisiana. You have decided to leave one of you district offices for the day and head home through the countryside. A drunken driver loses control of his truck

and collides with your car. It is a serious crash, and you are badly injured.

As you can see on slide 1, and I think if you could put the lights down we might be able to see that better, what happens next.

Lucky enough to have survived the crash, you know that if you do not receive medical help soon, you're going to suffer the consequences of internal injuries. The wireless phone that you bought for the convenience initially of communication is now your best hope in getting the help that you need so badly. However, simply having the phone does not provide the solution, does it?

Is your phone within reach? Is it in your briefcase? Is it in the back seat? If it is, what are the chances that you are going to be able to retrieve it? I could do this without notes, but it would help.

I've had to wing it before in traumatic situations, and this is one of them. No.

Are you able to dial 9-1-1, or for example, are your arms trapped? If you have the phone within reach, and you are well enough to place the call, that still may not be enough. As we all know, there are a variety of factors which may prevent you from receiving the appropriate response.

Are you in an area, for example, where there is what we call seamless, wireless coverage? Or because of the objections to the siting of wireless phone antennae, there is a chance that you're in what we call a dead zone, where there is no wireless signal. This is just an example of a map. In the lower, lefthand corner you'll now see the area of dead zone, which is in the black.

Did you dial the right number? Is it 9-1-1 or, as Congresswoman Danner said, or some other number like *-7-7? Many States continue to use a non-9-1-1 number for wireless emergencies.

But let's assume the best case scenario. You called the right number, in this case 9-1-1, and the call goes through. Relieved with the answer of the operator, you quickly realize that you are far from being saved; and while your call has been answered by the 9-1-1 operator, he or she now begins to ask you a series of questions. "Sir, where are you located?" "Do you know what your injuries are or how severe they are?" "Did your car roll over?"

As I have known firsthand from taking care of trauma patients, many of these people are startled and frightened. You don't know where you are. The crash happened at a fast pace, and you are uncertain of what actually occurred, and of course if this does go through your mind, you are saying, "Why is the operator asking me all of these questions?"

The answer is simple. When a wireless 9-1-1 call comes into a public safety answering point, and from now on I will refer to that as a PSAP. This is a screen of information that the operator sees. As you can see on the slide, nothing. A completely blank screen without critical information such as location, callback number, severity of crash, and probability of casualty.

Well, the outlook for you doesn't look very good, does it? Your rural location is a contributing factor. Statistics show that in cases of fatal crashes, response time for urban areas is about 35 minutes. For rural areas, it is nearly 53 minutes.

The majority of deaths related to vehicular crashes—52 percent occur prior to getting the victim to care. As you can see from this

particular pie graph slide, the light blue section of the pie chart shows if we speed response time we can and we will save lives.

In this instance why aren't you on your way to the hospital in a helicopter if appropriate? The answer is that safety capabilities of the phone were not combined with existing sensors in the car to allow for that appropriate response. And we all know it doesn't have to be this way.

Now what I would like to describe for you is a situation of tomorrow. Imagine that a crash occurs in the near future. With the successful implementation of an enhanced 9-1-1 system, wireless calls will not only go through, but they will automatically transmit the crash data and the location to the right authorities to allow for the appropriate response.

Let's say the crash occurs in Representative Markey's home State of Massachusetts. He knew I was going to pick on him. You leave your home on a Saturday evening, let's say, on your way to dinner at a friend's house in the outer suburbs. Before you start your car, you turn on your wireless handset, and you place it in the universal port mounted on your dashboard. This then will now allow for a hands-free, voice-activated use and connects the phone to the car's safety sensors.

Or let's say you bought a car with a system already installed or added one, like the one that's available in here, and I won't take the time to go through it, but this is an example of one product called Autolink, and it's a rear view mirror concept that has many of the features I've discussed.

With all the controls in the rear view mirror, and in the event of an emergency Autolink can dispatch police, fire or medical assistance to your exact location with the touch of a single button. The technology, using the wireless and GPS systens that exists today and the product will be rolled out in fourth quarter of this year.

As you head out west out of Boston through Framingham, you're out at an exit about an hour later to get to your destination, you find you're traveling on a more rural road with total darkness surrounding you. Out of nowhere a motorcycle loses control and collides with you head-on.

Assume the worst case scenario, you're conscious after the crash, but you've lost feeling in your arms and legs. Obviously you're going to fear the worst, and most of us in the medical profession would think, "A spinal cord injury." Due to your traumatic situation you're unable to clearly decide what you should do—while you have been seat-belted and your air bag may have saved your life—you now are still in danger obviously of suffering further injury. However, you are in much better shape than it appears, because, compared to the previous situation that I just described; even though your injuries are more severe, you are in a better situation because your vehicle is equipped with ACN or what we call automatic crash notification.

And without any action on your part, your wireless phone, mounted in your universal port, has already dialed 9-1-1 for you. As the crash occurred, the safety sensors in the car transmitted a complete data stream, along with 9-1-1 call. And because the com-

munity you are in came to understand the importance of wireless to safety, there was an wireless antennae to receive the call.

And because the wireless industry installed location technology, your location is identified, and the call went to the closest PSAP. Due to the linking of in-vehicle technology with your wireless phone and the location technology, the PSAP screen looks like this, as you can see, on this slide.

As the 9-1-1 call is received by the operator the data stream transmits the crash information, opens a voice channel between you and the PSAP operator, and this data, along with simple information collected by the operator in communicating with you, such as age and gender, is put into the "triage algorithm" that you can see in the lower left hand screen. Triage is a French word. It means to sort. And as we receive information from that ACN system we can sort patients according to their severity of injuries.

Along with that "triage algorithm" you will notice that the PSAP is able to pinpoint the caller's exact location; again, thanks to the location technology and the wireless network.

You might note that the icons on the right side of the screen includes the 9-1-1 operator icon to help locate the closest and most appropriate emergency personnel so that they can communicate to the victim and together decide what type of help should be dispatched.

So whether the severity of the crash necessitates a helicopter, ambulance or police vehicle, the appropriate response is sent to the exact location. Not only are lives saved in this scenario but valuable equipment is saved for more severe crashes and therefore the costly improper deployment of EMS staff have been eliminated, and this is something that we're very concerned about.

Within minutes the helicopter is airborne. It's on its way to retrieve you. Your life has been saved, thanks to the connecting wireless, to the appropriate emergency personnel through the 9-1-1 system.

I have just mentioned the PSAP screen of the future as one of the solutions, but now let us examine this unique and important safety tool, and that's what it is. It's a safety tool, in greater detail. And while these two scenarios are all too common, all level of crash victims can benefit from this important safety device.

Chairman Tauzin, if we can return to you for a moment. Let's assume that you were in the crash, and your car is now equipped with that type of system that we have just discussed, and let's assume there is a fairly severe crash, and as you can see we have switched your slide projector to the PSAP screen of the future. And the system has already automatically dialed 9-1-1, pinpointed your location.

The data stream tells us that you were traveling at 50 miles per hour, your car rolled over, your safety belt was fastened. There was no side or rear impact. It also provided information that the weight of your car was 3,800 pounds. It opened a voice channel for you and the 9-1-1 center.

Other key variables in predicting the severity of injury are age and gender, and since I have you on the line may I please have your age, Chairman Tauzin, just for purposes of this. We already put in his age. We enter that you are a male and the operator will

enter these variables, which is important by the way to be able to produce this probability of casualty. Scoring, we get a .9796 or 98 percent probability of casualty scoring.

And therefore the PSAP operator can see that you are in great danger and will consult with the regional trauma center or appropriate care facility and dispatch the appropriate response, in this case let's say it was a helicopter.

These are just short vignettes or short examples that have displayed the reality of an effective wireless 9-1-1 communications network. The most important aspect to take away from these examples is that ComCARE is promoting using existing off-the-shelf technology to allow for appropriate response.

Lives as well as staff and financial resources can be saved through the implementation of this type of system that we have just described. The reasons the member so the ComCARE Alliance, Communications for Coordinated Assistance, and Response to Emergency all got together was really to link these technologies into one end-to-end system.

We are delighted with the support that we have received from so many sources, including Dr. Martinez, who will be testifying here today, some of the companies and organizations that are also testifying, and we look forward to working with you. I thank you for your time.

[The prepared statement of K. Susan Hoyt follows:]

PREPARED STATEMENT OF K. SUSAN HOYT, CHAIR, COMCARE ALLIANCE

INTRODUCTION

Thank you for inviting me to testify today before the Subcommittee. I am privileged to be here in several capacities. As the Chair of the ComCARE Alliance, "Communications for Coordinated Assistance and Response to Emergencies," I am representing a broad-based coalition promoting the nationwide development of an end-to-end communications network to enhance public safety. I am also the Immediate Past President of the Emergency Nurses Association, a voluntary membership organization comprising more than 25,000 emergency nurses. Currently I serve as the nurse practitioner clinical placement coordinator at the University of San Diego. On behalf of ComCARE and ENA, I am pleased to talk about the exciting and challenging opportunity we have to link technologies to save lives and reduce the impact of injuries.

As the demonstration of the end-to-end communications system indicated, the technologies to accomplish this exist today. As the founders of the ComCARE Alliance met early last fall, we began to discuss the current situation and the various initiatives we were all pursuing separately, and quite successfully. It was amazing to consider what we could accomplish if we worked together.

Consider these facts: In the United States we have the most advanced emergency medical system in the world. "Smart cars" are on the roads today that have more computer chips than your office PC. There are more than over 57 million wireless subscribers in the United States, with the number projected to double by the year 2001. Over 83,000 calls a day are made on wireless phones to 9-1-1. There are 15,000 Public Safety Answering Points (SAPS) that answer calls to 9-1-1 and dispatch help. Yet all of these are not linked together, with the upgrades necessary to provide a really effective end-to-end emergency communications system. The various members of the ComCARE Alliance joined together to "connect the dots," to link these existing technologies.

A PLAN TO "CONNECT THE DOTS"

Members of the ComCARE Alliance are not here today to ask you to create a big new federal program. Nevertheless, you have an important role and we need your help to make this vision a reality—in the near term. This is not something five or ten years away that needs enormous R&D funding, inventions or months of discus-

sion. Most of what we are talking about can happen today. We urge your Committee to help us take the steps necessary to encourage and support the deployment of an end-to-end emergency communications system in the states through federal legislation.

The primary implementation work in improving these systems must be done at the state and local levels. Yet you, as members of the Committee with jurisdiction both over NHTSA and telecommunications issues, have the authority and the "bully pulpit" to raise awareness on a national level, and provide appropriate support. Congress should make the development of an end-to-end system a national priority, with legislation that provides incentives for the states, while leaving the actual implementation decisions to the key stakeholder groups in the states.

The members of ComCARE represent those key constituent groups—emergency nurses, emergency physicians and trauma surgeons, law enforcement personnel, fire services, state EMS directors, automobile safety groups, 9-1-1 officials, and wireless carriers—who will work to implement the system. Our coalition was formed because we all have a role in the delivery of some component of the emergency response system. We need federal legislation, but our work will not end when you pass it. It will really just get started, as we work together in each state on the implementation systems that will really make it effective.

By trade profession I am a Mastered Prepared Clinical Nurse Specialist. As a former trauma coordinator, an educator, an emergency nurse, a teacher, and now as a clinical placement coordinator, I witness firsthand the value of wireless communications to providing emergency care. I can confirm that this end-to-end system will have a valuable impact immediately. Response time is the most critical factor in crashes and other life-threatening emergencies such as heart attacks. An end-to-end system will dramatically reduce response time.

In addition, it will give us critical information so we can send the best teams to the scene and prepare the right people at the hospital. Today my nursing colleagues say "hope for the best and prepare for the worst" when responding to a life-threatening incident. In most cases we have very little scanty and or incomplete information before the victim comes in through our door. In the emergency department, often we hear about a crash from police radio reports in the field, but we don't know much more than the fact that a crash occurred. As the a trauma coordinator at Mercy and Sharp-Grossman in San Diego, I had to make decisions about whether I needed to notify the trauma team, find a specialist to consult on a head trauma, or treat someone for superficial wounds. Coordinating communications with those responding in the field, and getting receiving *real time data* on what actually occurred in during a crash will let all of the emergency medical services professionals do our jobs better more effectively. Congress should pass legislation that supports the development of an end-to-end system.

The ComCARE Alliance is not asking for new funding from the federal government to pay for this program. Instead, we recommend that you create a new source of revenue for the federal treasury by requiring federal agencies to make property available for antennae siting, and then recycle most of that the resulting leasing income back to the states for public safety purposes. The wireless industry will pay for the siting of their antennae on federal property. Projections indicate that this will generate a significant amount of revenue. From these funds, Congress should establish grants for the states that would help the approach. Our program calls for prevention components on one end, upgrading the emergency response infrastructure in the states, and, finally, supporting research efforts that perfect components of the end-to-end system.

ComCARE urges the Committee to consider an approach, including incentives to states, that would include the following components:

Prevention Programs

Drunk and aggressive driving is a very serious contributor to crashes, deaths and injuries. There are 57 million wireless subscribers in the United States who could be educated to help serve as an extension of the law enforcement community to prevent crashes related to aggressive or drunk driving. Legislation should include incentives for states to tap into the value of communications as a prevention tool. For example, states could expand some of the current successful public/private programs linking wireless subscribers and police to report aggressive and drunk driving, and to educate drivers on the full range of driver distractions.

Making 9-1-1 the Universal Emergency Number

I have heard too many stories of crash victims unable to reach help by dialing 9-1-1 on their phones, because a state, county, or city has designated another number such as #77 or #MSP (Massachusetts State Police) as the number for wireless

calls. Because many wireless users are traveling through unfamiliar areas in multiple states or regions, they do not always know the local number and are unable to get help when they need it. One recent story highlighted this problem when a couple traveling through Missouri from another state noticed a drunk driver cutting through traffic and speeding along the interstate. They grabbed their wireless phone and dialed "9-1-1," but could not reach help. The couple tried calling other numbers, then called information for the local police, but since they were from out of state, they weren't sure of their location. They followed the reckless driver; but, unfortunately, it was too late. The driver caused a severe vehicle crash that resulted in fatal injuries before they couple reached the local authorities on the appropriate wireless emergency number—"#55."

Congress should make 9-1-1 the national number for emergencies. This should be a condition for states to receive any funds to upgrade their systems.

Upgrading 9-1-1 Networks

Other witnesses today will speak to the issue of what is needed to upgrade our 9-1-1 systems to handle the growing number of wireless calls, and wireless location data. Improving our 9-1-1 infrastructure is the primary purpose for the grants ComCARE proposes. With 15,000 Public Safety Answering Points (PSAPs) across the country, all with various levels of sophistication and technology, a coordinated effort is needed to improve our national infrastructure. ComCARE is not suggesting a national 9-1-1 network. We support a program that will distribute resources to the states to enable them to purchase the necessary equipment, software, hardware and other resources to bring their emergency response systems into the 21st century. We do not think that the federal government can or should pay for the entire upgrading process. Our public safety supporters around the country all agree, however, that some incentive money will "juice the system" and motivate states to make this a priority so they can and contribute additional resources to get the upgrades done in a reasonable time frame.

Coordinated State Planning

A critical component to speeding shortening response times is location. As noted in the demonstration, today wireless 9-1-1 calls cannot be located. While there is an FCC requirement that carriers install E9-1-1 by 2001, few consistent state policies or systems exist for implementing it, especially in relation to carrier cost recovery and technology. For example, some states send wireless 9-1-1 calls to a state police office, even if it is on the far end of the state. Coordinated state policies are needed so that carriers are encouraged to install E9-1-1 systems quickly, and so that calls get routed to the appropriate place in a timely manner. Bob Miller, the 9-1-1 Director for the State of New Jersey and a fellow member of ComCARE, is an expert on this issue and will discuss this in more detail in his statement.

In order for states and carriers to move forward on implementing adding location technology to their 9-1-1 networks, two additional requirements for receiving block grant funds should be included in any federal legislation. First, states should be required to develop a coordinated state plan for upgrading their networks and implementing a state end-to-end system. Second, states should provide wireless carriers and users with the same legal protections for 9-1-1 as wireline phone companies currently have. These two conditions will help ensure that implementation proceeds rapidly.

I cannot overemphasize the importance of a coordinated state plan. States need to bring all the stakeholders to the table. They need to work out not only the details of E9-1-1 implementation, but also where the new automatic crash information should go, what the protocols for emergency response should be, who should be included in response decision making and so on.

Medical Research

Although deaths from vehicle crashes have declined in recent years, deaths at the scene prior to emergency medical care have *doubled* in the past twenty years. They now exceed 20,000 per year. For 40% of the crash fatalities today, response time was 20 minutes or more. In urban areas, the average EMS response time in fatal crashes is 30 minutes. In rural areas, it is 50 minutes or longer. According to FARS (Fatal Accident Reporting System) at the National Highway Transportation Safety Administration, 57% of the fatalities in 1995 occurred in rural areas, as opposed to 40% in urban areas. The system ComCARE is proposing can save lives and reduce the impact of injuries. This is due to a more integrated communications system that will notify the emergency services professionals more rapidly and dramatically reduce response times. In addition, sharing this data with all of the appropriate response agencies—fire, police, EMS, medical professionals—allows us to send the

right kind of help fast. That will save more lives and reduce the impact of injuries, and it will also save major and financial resources for all of these agencies.

Leading trauma surgeons and emergency physicians, with support from the National Highway Safety and Transportation Administration (NHTSA), have developed a system that can dramatically reduce the emergency response time and save lives by getting the right treatment to a victim as fast as possible. This automatic crash notification (ACN) system uses a network of vehicle sensors (most of which already exist) to automatically transmit on impact the speed, force of impact, whether airbags have been deployed, or seatbelts were in use—information that when received by emergency care experts, can be instantly analyzed to predict the likelihood of serious injury and the appropriate level of care. Wireless technology, which transmits data and provides a return voice channel to victims, is the critical communications link between victims and emergency care professionals. When serious injury is indicated, the right kind of emergency response can be immediately dispatched to the scene and lifesaving care commenced.

The research to date on automatic crash notification has been limited. Research is underway in two locations. Comprehensive testing, linking this crash data to advanced medical expertise to improve emergency medical response, however, needs to take place in diverse locations around the country, including rural areas. Federal legislation should support an expanded research effort to field test ACN and refine the "triage algorithm" that the demonstration at the beginning of the hearing featured.

To develop a system where critical triage decisions would apply to the entire country, the proposed research effort should occur in a variety of communities to reflect the geographic diversity, population characteristics, and climatic features of the 50 states. Trained medical personnel will be stationed at the trauma units to review the information transmitted by the crash sensors, determine the medical criteria for dispatch, and test evaluate the projections for response computed by the triage algorithm against based on what actually happened to the car and the victim.

Encouraging Private Sector Efforts to Connect Wireless to Smart Cars

Today 85% of wireless consumers buy portable phones. To extend the benefits of the technologies I have described to those who do not have car phones, a "universal port" and cradle should be developed. Individuals can then plug their portable phones (with their own adapters) into the car and connecting the wireless phones to the crash sensors installed in the cars. (A universal port and cradle would also offer convenience and safety, allowing hands-free use of portable phones, particularly when voice activation technology becomes common). If the car crashes, the sensors would then trigger the phone, hooked to the port, dial E9-1-1, transmit the data from the sensors to the appropriate emergency personnel, and open a voice channel so emergency personnel could talk to the victims.

The automobile and wireless industries are already working on standards to connect sensors to internal communications systems and then to wireless phones in cars. And there is a separate private sector effort occurring to create a "universal port" for hands-free use. We hope you will encourage those efforts outside of legislation, and encourage these parties to work together to link these two, now-separate efforts.

Legislation could also stimulate these discussions by providing a forum for the leading engineers from industry to meet with leaders from the medical community and collaborate concerning the information in needed from the car's electronics to make ACN work properly. Once again, this is not creating any new technology. We are, simply "connecting the dots" for what is already being developed in the private sector.

ComCARE does not believe legislation or regulation is required in this area, merely encouragement of the current private sector initiatives.

Seamless Wireless Telecommunications Networks:

All of ComCARE's members agree that wireless communications are the critical link in this end-to-end system. The call has to go through if someone is to send help. For this reason, the ComCARE Alliance supports a "no dead zone" policy.

Federal, state and local governments have a responsibility to make those emergency communications possible by encouraging and allowing the construction of ubiquitous, seamless wireless networks. We are not asking you to pre-empt any local zoning authority. The 1996 Telecommunications Act says that networks should be seamless, and no governmental body can bar wireless communications from its jurisdiction. Wireless carriers need to work with local communities to find locations for antennae to build out their networks, but the local communities cannot say "no" if that will result in a dead zone in the network.

On siting, we do urge that Congress to codify the President's Order, issued in 1995, that directs federal agencies to work cooperatively with wireless carriers and allow siting on their properties. Carriers must be reasonable and work to find locations that do not conflict with the federal agency's primary mission. These federal lease revenues should be deposited in a dedicated fund that will support the state grant program and research programs on ACN and the development of a universal port.

CONCLUSION

What I have presented to you today is a tremendous opportunity for all who are concerned with enhancing public safety. Unfortunately, motor vehicle crashes are a leading cause of death and severe injury in our Nation. This effort to link technologies can prevent some of these crashes from occurring and speed help to those crashes that we cannot prevent. It will also aid those facing other life-threatening situations. We have the chance to work together to really make a difference in the lives of Americans. I pledge my support and the support of the members of the ComCARE Alliance to help you enact federal legislation that would achieve the goals that I have discussed. Consider us the foot soldiers for your efforts in Congress and around the country. We will help educate other key decision-makers in Congress, the states, and the Administration about the need for an end-to-end emergency communications system. Consider us the foot soldiers for your efforts in Congress and around the country. Together we can make "end-to-end" emergency communications happen.

Thank you for the opportunity to testify before you today.

Mr. TAUZIN. Ms. Hoyt, would you just for the record again briefly identify the ComCARE Alliance itself? What is it? Who does it represent?

Ms. HOYT. I think some of you had received a brochure, and I think we have more of them here today. The ComCARE Alliance, and I'll say that again, is Communications for Coordinated Assistance and Response to Emergencies.

And the Emergency Nurses Association, of which I am here representing over 25,000 members and hope to have 2.5 million nurses on board by the end of the year, were asked to join this in the fall of last year really out of a public safety effort. We had long been involved in injury prevention activities but thought this was really a way—we talk about saving lives—this is also a way to prevent death.

And the Emergency Nurses Association got involved. Other groups involved—I can read a few of them here—the Automobile Club Association, the Fraternal Order of Police, the Coalition for American Trauma Care Director—I know Bob Miller is here to testify here today—the National Flight Nurses Association, Cellular Telecommunications groups, our arm of emergency nursing—what we call NCARE—and the list goes on and on.

So it's not just health care personnel, although that's what I represent, but there are people from the communications industry and from technology who will be here to speak today. And that's why we got onboard, because we really thought that there is no coordinated effort, no coordinated system.

Mr. TAUZIN. The Chair will recognize members in the order of appearance for discussion. Let me first ask a couple of quick questions, Miss Hoyt. What you are telling us is that much of this technology already exists today.

Ms. HOYT. Correct.

Mr. TAUZIN. A lot of the technology is already in the vehicles. There are quite a number of computers and indicators inside the vehicle; that literally what is lacking for a complete system is a

ubiquitous 9-1-1. While the system, No. 1, fully deployed. No. 2, the kinds of acceptance in the marketplace for more and more of this technology in the vehicles and for literally the kinds of coordination with emergency care personnel—so that the centers can in fact accumulate this information and get help out to a person in distress.

Ms. HOYT. So that we can get the real-time data and be making the decisions in the pre-hospital phase of care.

Mr. TAUZIN. We talked a little bit about—you showed on the chart about the time required to answer an emergency under current conditions. Have you all done some estimates about how much of this time could be shortened if we had such a system generally in place around the country and how many lives might be saved?

Ms. HOYT. I would defer I think to another panelist on that because they have some in their testimony, some very specific information about that.

Mr. TAUZIN. Is there anything about what you have described to us as the future that is not achievable with current technology? Is there something missing or is it simply a matter of bringing all the technology together?

Ms. HOYT. I think, Mr. Chairman, that that's exactly what we are saying. We have the technology. We know that we can put an end-to-end system together, that we can make it seamless.

Why I am sitting here today is because I am a nurse and because I believe—and I think we have seen—and again, I am not an expert when it comes to antennae siting or location technology—but I know that the technology exist, and I know that if we work together in a coordinated system and fashion, and that's why the sound bite that you will see on here is we keep saying "Connect the dots," and that's what we are referring to. The technology is there.

Mr. TAUZIN. Thank you very much. The Chair will yield to members upon request. Any members wish to exchange with Miss Hoyt on her demonstration. We thank you very much for the demonstration, Miss Hoyt. We deeply appreciate it. If you would leave some of your information on ComCARE with the Clerk, and we can make sure it's obtained for the committee.

Ms. HOYT. Thank you Mr. Chairman.

Mr. TAUZIN. Thank you very much. The Chair will now please recognize the second panel, and the second panel will include the Honorable Hal Daub, former member of the U.S. Congress, now Mayor of the city of Omaha. We'll have Dr. Steven Hargarten, the Director of the University of Wisconsin Medical Center; Mr. S. Robert Miller, Chair of the Regulatory Committee, National Emergency Number Association; the Honorable Dr. Ricardo Martinez, as we say Cajun country Martinez, the Administrator of the National Highway Traffic Safety Administration; Mr. George Heinrichs, President and CEO, SCC Communications Corporation; and Edward R. Trout, Chairman of the American Trucking Association, Inc; and Sue will join us in this panel as well.

We thank you all, ladies and gentleman, for appearing, and we'll now hear—I am sorry.

Mr. MARKEY. Before we begin with that, would you mind if I asked Miss Hoyt just one question.

Mr. TAUZIN. Absolutely. The Chair is pleased to recognize the gentleman from Massachusetts for questions.

Mr. MARKEY. I thank you, Mr. Chairman, very much. I believe that the benefits of ubiquitous 9-1-1 wireless capability and instantaneous availability of location; callback number; crash data; driver information such as age, gender, blood type, and other information; is easily understood and transparent.

One concern I have deals with the privacy issues raised when implementing a system that would have personal driver information built into a system, along with location capability that in the wrong hands could infringe on personal freedom by potentially giving people the ability to track where a person drives and where a person visits.

How do we safeguard privacy while making information available in an emergency, Miss Hoyt?

Ms. HOYT. I am sorry. I was reading another note I got from someone.

Mr. MARKEY. The question is: Essentially since we have this dual objective of ensuring that people are given access to the emergency services which they will need during times of crisis—health, fire, police—but on the other hand we don't want people to be tracked full time—where are they going, who are they visiting, whose homes are they going to, what places are they—how do we balance that with this technology?

How do we protect against it being used as a way of tracking people?

Ms. HOYT. George would like to answer that question we had talked about issues of previously. Would that—is that?

Mr. MARKEY. No. You're not qualified to answer that question?

Ms. HOYT. Again, I don't want to hold myself out as an expert in some of those areas. I was really here—I am the Chairperson of the ComCARE Alliance, but I am the health care expert, and I really feel that is a bit of a legal question, and maybe I am not understanding the question correctly.

I do think it's an issue. I do think that is something that we are going to have to tackle, but I don't think it's an issue that we can't overcome, and I still feel, as the Alliance, we need to move forward in that regard.

Mr. MARKEY. Do you want to answer it very briefly, Mr. Heinrichs? You heard my question?

Mr. HEINRICHS. Yes I did.

Mr. TAUZIN. Identify yourself for the record and then if you will respond please, sir.

Mr. HEINRICHS. Sure. My name is George Heinrichs. I am the CEO and President of SCC Communications. We provide 9-1-1 infrastructure in a large part of the U.S. We had discussed this, and I think the approach that makes the most sense is to deal with this like we deal with privacy issues on 9-1-1 in general, and that is it becomes a local matter.

I believe the Justice Department has ruled not too long ago that citizens do implicitly give up their right to privacy when they dial 9-1-1, but other ways their calls are protected by our laws, and I would personally see that, based on my experience, that the State

laws and the State standards for each of those privacy issues are probably the cleanest way to meet local requirements.

Mr. MARKEY. Do you believe that they're adequate?

Mr. HEINRICHS. I don't believe they address the issue.

Mr. MARKEY. Well, that's my—that's what I am saying. We are here to have to have a national policy on 9-1-1, so while there are benefits of the technology, there are also drawbacks to the technology. Should we deal with the issue comprehensively here?

Mr. HEINRICHS. I think so. I think the general approach, however, has been to take issues like liability and privacy, and since different States have different standards for their communities, just apply those standards uniformly across 9-1-1 and make that the national policy.

Mr. MARKEY. Well my own feeling is that we need a national standard, that we can't allow for States to trail, that we need a minimum level of privacy protection which every American is entitled to, and I would like to—if we do move—I would like to deal with that issue so that sensitive personal information is not comprised because individual States haven't fully understood what the privacy implications are.

Mr. TAUZIN. Would the gentleman yield? I want to thank the gentleman for raising the issue. I think the gentleman is correct, and I hope in the conduct of this hearing we can talk about it a good deal more. The issue the gentleman raises of course is not when a 9-1-1 call is placed itself, and obviously that imposes a certain condition that changes the rules of privacy and has been interpreted to change it.

It's when a 9-1-1 call has not been voluntarily place, but when the vehicle is allowed to communicate freely with a center somewhere, even without an accident having occurred that these two-way open channels of communication could in fact be used in an inappropriate way, and that maybe perhaps some national standards and how that is deployed and developed may in fact be necessary as we, in this committee and in the full committee, are going to explore privacy issues with broad band services as well.

So I'd ask you to put it on your radar I want to commend the gentlemen for raising it. It's an issue that the chairman hopes we will have discussed here and as we move forward with the issue.

Mr. MARKEY. In other words when I am out—thank you Mr. Chairman—when I am out in rural Massachusetts, when I've gone that extra 1 hour past Framingham—by the way I am in New Hampshire at that point, and you're right, I don't know anything about the emergency numbers there or whatever.

Mr. TAUZIN. Or cows.

Mr. MARKEY. Or what a cow is or what a bull is, but the concern would be that people can pick up personal information about where I am and where I've stopped, and it may be of a very sensitive, a very sensitive nature.

Mr. TAUZIN. Oxley wants to know, if you're going to New Hampshire for any reason in this Presidential year. Is that what he wants to know?

Mr. MARKEY. I guess what I am saying is that there is an era that we're in right now where these purple-haired 2-year-old hackers can crack in and find out this incredibly sensitive information

about people's lives. Pay them $150 bucks, and they'll tell you everything you ate or bought for the last 10 years, people you telephoned or whatever.

What I think would be of concern to people is if they knew that people could track that you were taking your teenage daughter to a psychiatrist at age 13 or 14 and you were traveling that extra hour to get it out of the community, to take it out into some more rural place, that you were doing something—in other words, it was very sensitive to your family, and you didn't want to compromise, and I would hope that we would be able to ensure that as we move forward, we'd deal with both the positive and negative aspects of this technology.

Thank you Mr. Chairman.

Mr. TAUZIN. The Chair thanks the gentleman. Any other questions of Miss Hoyt?

Mr. MARKEY. Can I introduce to you somebody who you might like to see? We have the—I live in the ninth largest county in the United States, Middlesex County, and we have with us the Sheriff of Middlesex County.

Mr. TAUZIN. Oh we need to meet the Sheriff.

Mr. MARKEY. He's your kind of guy, you know, Jim DiPaola, who is the Sheriff of Middlesex's County and very interested in all of these issues, and I think I might be working with him, you know, to help coordinate a policy on it. Thank you.

Mr. TAUZIN. Sheriff, I might suggest that maybe you want to track Mr. Markey.

Mr. MARKEY. He was a Police Sergeant in my hometown before he got this job, and he was tracking me.

Mr. TAUZIN. Thank you very much, Mr. Markey. We'll now introduce our panel again, and we'll start with the Honorable Hal Daub, former Member of Congress from 1981 to 1989 I think, Hal, and representing the great State of Nebraska, now the Mayor of the city of Omaha and a witness before our panel. We want to welcome you to this kind of perspective in the legislative process, Mayor, and welcome your testimony.

STATEMENTS OF HON. HAL DAUB, MAYOR OF OMAHA; STEVEN HARGARTEN, DIRECTOR, UNIVERSITY OF WISCONSIN MEDICAL CENTER; HON. RICARDO MARTINEZ, ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION; GEORGE HEINRICHS, PRESIDENT AND CEO, SCC COMMUNICATIONS CORPORATION; S. ROBERT MILLER, CHAIR, REGULATORY COMMITTEE, NATIONAL EMERGENCY NUMBER ASSOCIATION; AND EDWARD R. TROUT, CHAIRMAN, AMERICAN TRUCKING ASSOCIATION, INC.

Mr. DAUB. It's a pleasure to be here to see you and your Vice Chairman and to look at issues from this side of the table. I am pleased to see my good friend and classmate Congressman Oxley too. It's nice to see you.

Members of the committee, I am really pleased to be here, not only as the Mayor of my city, the 45th biggest city in the country, Omaha, Nebraska, but to testify on behalf of the National League of Cities, the largest and the oldest organization representing our Nation's cities and towns, and the National Association of Counties,

the only national organization representing county governments in the United States.

Both NLC and NACO are composed of course of Republicans, Democrats and Independents who are leaders in cities and counties of all sizes. I am pleased to be here to provide you with our views regarding enhanced 9-1-1 services for wireless communication.

I have a statement that I'd like the opportunity to have acknowledged and made a part of the record, and to take a chance at not being too flattering but to tell you that I think it's a great idea to have this hearing that's so critical as technology is beginning to really become useful in this area of extending emergency services, of public safety services, to citizens all across this country.

So I think it's a great idea, and you've assembled a staff that's done a great job of putting wonderful panels with a great deal of expert information that will be available to all Members of Congress. So I want to commend you, Mr. Chairman, for your leadership in this field.

I'd like to talk about three subjects briefly, summarize my statement. Briefly I'd like to speak about wireless identification, 9-1-1 enhanced wireless identification.

I'd like to speak just briefly about radio spectrum and the allocation of that spectrum to public safety transmissions and particularly with respect to what Mr. Markey's point was, how 800 megahertz trunk tower availability can get us to digital communication, which is a much more safe and secure form of communication as we bring this technology into the public safety arena.

Then briefly about cellular tower sitings because I think all three go together, and it would be helpful from the standpoint of servicing our constituents in our towns and villages and counties across the country.

I'd like to ask you to assist, Mr. Chairman, in three ways: First, to insist upon full funding for local law Enforcement Block grants. It's the only program that can offer particularly smaller communities some assistance on the technology acquisition side.

Second, to coordinate with the Justice Department a meeting in which local governments and industry can come together to discuss ways in which we can work together toward the overriding goal of this particular subject that's before your committee today.

And third, to request the Congressional Budget Office to conduct a survey that would include the status local government efforts to implement Enhanced 9-1-1 systems for wireless communication, where partnerships between local governments and industry are working and why; and how systems and services are to be financed.

Approximately 20 percent of the 9-1-1 calls are coming from individuals using wireless phones. There are about 54 million wireless subscribers now, and that number is projected to increase to 100 million by the year 2000. Many people purchase wireless phones for the sole purpose of having access to emergency assistance.

In order to help provide this help, local governments, at the level where we serve, are most directly responsible for protecting and responding to events we describe as emergencies. Toward that end NLC supports the actions taken by the Federal Communications Commission regarding its efforts to ensure that all 9-1-1 calls from individuals using wireless phones receive the same level of service

as those callers using wireline phones, which provide location information through textual displays of the caller's street address.

The surge in the use of the cellular phones for emergency purposes has skyrocketed. In my hometown of Omaha, Nebraska, at a major intersection across from a university, one accident 10 years ago might get one call.

Today that operator will get 30 calls, and if there were an identifier system, when the technology is easily available, then they could sort out the priority because within 60 seconds those 30 calls are identified at that location, and it gives some perspective to those people who are working under a great deal of pressure to be able to process those calls. It also gives an opportunity for the dispatchers to look at their allocation of time and what other instruments of life-saving techniques might be dispatched.

I've got a statement that—if you'll look at pages 3, 4 and 5 closely when you have time—identifies some of the implementation requirements that we'd like to see occur. We're particularly concerned about the FCC's concept of total cost recovery, and I want to spend just a minute on this. We don't believe that the FCC said in their requirements for April 1 of this year and for the year 2001 that there was to be a total cost recovery; only that there be discussion and cooperation with industry on a cost recovery mechanism.

And we think there's a hang-up here. In my State the industry got together with our State Legislature Committee. We could implement legislation because they said, "We're not going to give you, Omaha, Nebraska, until your State has adopted a system of total cost recovery." We don't believe that's what the FCC said or meant. We believe that we should be cooperating, like we are trying to do with the industry on the siting of cell towers to get there before all of these so-called State regulatory statutes are put in place to develop full cost recovery.

So we think there's a serious problem here, and we think Congress ought to speak at least as a matter of using the bully pulpit to get this done. I fear there are going to be mayors across this country who are being asked to sight cell towers like they were mushrooms sprouting up in a dark forest. They are going to be starting to think, "Well, if we are supposed to not impede, per Congress' direction, the actual implementation of wireless communication, but on the side we can't get public safety emergency 9-1-1 wireless technology enhancement coordinated, maybe we're going to have to sit down and talk about who's holding up the show here." Now I am trying to cooperate as a Mayor of a big city, but we'd like the industry to cooperate more on the public safety side and thus leave the preemption issue of cell tower sitings to local governments, which we think is very important.

Mr. Chairman, I think that summarizes what I've had to say on behalf of NACO and NLC, and I'd be happy to answer any questions.

[The prepared statement of Hon. Hal Daub follows:]

PREPARED STATEMENT OF HAL DAUB ON BEHALF OF THE NATIONAL LEAGUE OF CITIES

Good morning. My name is Hal Daub, mayor of Omaha, Nebraska and testifying today on behalf of the National League of Cities (NLC), the largest and oldest organization representing the nation's cities and towns and the National Association of

Counties (NACO). NACO is the only national organization representing county governments in the United States. Both NLC and NACO are composed of Republican, Democratic and Independent leaders of cities and counties of all sizes. I am pleased to be here today to provide you with the our views regarding enhanced 9-1-1 services for wireless communications.

Elected officials in cities and counties across the country are faced with a considerable challenge in our efforts to implement enhanced 9-1-1 systems for wireless emergency services including the best ways to work with industry and our capacity to finance the technological costs. The investment is substantial and the opportunities for Federal assistance at this time are limited almost entirely to the Local Law Enforcement Block Grant. Though modest ($523 million for FY 1998), it is clearly the only Federal grant program available directly to cities and counties for public safety purposes. A primary use of these funds to date is public safety technology.

Mr. Chairman, we would ask you to assist us in three ways:

1. Insist upon full funding of the Local Law Enforcement Block;
2. Coordinate with the Justice Department a meeting in which local governments and industry can come together to discuss ways in which we can work together toward the overriding goal of the publics' safety; and
3. Request the Congressional Budget Office to conduct a survey that could include: the status of local government efforts to implement Enhanced 9-1-1.systems for wireless communications, where partnerships between local governments and industry are working and why, and how the systems and services are being financed.

Approximately 20 percent of 9-1-1 calls are coming from individuals using wireless phones. There are approximately 54 million wireless subscribers now and that number is projected to increase to 100 million by the year 2000. Many people purchase wireless phones for the sole purpose of having access to emergency assistance.

In order to provide that help, local governments, as the level of government most directly responsible for protecting and responding in the event of an emergency, must be able to provide local emergency responders the tools they need to do their jobs, including the latest technologies, equipment and training techniques available. This also includes working in partnership with other stake holders.

Toward that end, NLC supports the actions taken by the Federal Communications Commission (FCC) regarding its efforts to ensure that all 9-1-1 calls from individuals using wireless phones receive the same level of service as those callers using wireline phones, which provide location information through textual displays of the caller's street address. The surge in the use of cellular phones for emergency purposes has skyrocketed, outpacing the implementation of the technologies that can locate the caller or even call back if the call is disconnected. Unless we can change this, we will leave too many citizens vulnerable when they call for help.

Under the FCC rules, beginning April 1, 1998, all local carriers will be required to provide information to Public Safety Answering Points (PSAP) regarding where a wireless call is coming from and provide for the ability of the PSAP to call back the caller—critical if the caller is disconnected, disabled, or becomes disoriented. By October 2001, the FCC will require all that carriers can locate a caller using a wireless phone for 9-1-1 purposes.

The implementation and deployment of enhanced 9-1-1 rules would dictate that:

1. 9-1-1 calls from wireless mobile phones which transmit a code identification must be transmitted without delay or credit verification;
2. Wireless 9-1-1 calls will be transmitted to any emergency service provider who requests that it be transmitted;
3. Emergency service providers will be able to call back wireless 9-1-1 callers who are disconnected; and
4. Emergency service providers will be sent to the location of a wireless 9-1-1 caller within the radius of 140 feet in 67 percent of the cases.

There is a caveat. That is that these requirements will only apply if:

1. A carrier receives a request from the administrator of a PSAP that is capable of receiving and utilizing the data elements associated with the services; and
2. A mechanism for recovering the costs associated with the provision of these services is in place.

When the FCC released its Report and Order on Enhanced 9-1-1 Emergency Calling Systems in July of 1996, directing wireless telephone carriers to provide Enhanced 9-1-1 service, it was hailed as a major milestone in providing public safety service to an every growing segment of 9-1-1 callers. The intent was for the wireless carrier to provide a 10 digit callback number and location data of the cell site or sector from where the call was originated by April 1, 1998 and precise location information by October, 2001.

The only requirement on local 9-1-1 answering points was that they must ask for the service, be capable of receiving and using the data, and there must be a cost recovery method in place for the services. The City of Omaha notified the wireless providers in March 1997 that we wanted the service and asked for cost information to be able to determine the appropriate cost recovery mechanism. The answers that we received from the wireless carriers, emphatically stated that we first had to have a cost recovery mechanism in place before they would office any cost information. In October 1997 we participated in an interim study conducted by the Transportation Committee of the Nebraska Legislature relating to Wireless E-911 Service Surcharges. At that time, the lobbyist for the wireless carriers told the legislature that the FCC is mandating that a total cost recovery mechanism must be in place to pay for this service. The committee was looking for answers and got very few.

What we are experiencing in Nebraska is being played out in almost all state legislatures. During the 1997 legislative sessions, 10 states passed wireless Enhanced 9-1-1 bills dealing with cost recovery and indemnification, while 14 other states introduced bills that did not pass their respective state legislatures. Wireless enhanced 9-1-1 legislation is expected to be introduced in 21 states during the 1998 legislative cycle. The reason for most of the failures is that governments and the wireless carriers cannot agree on how best to implement this rule and how to pay for the service.

The funding of 9-1-1 services is not a new issue or monster which has suddenly sprung up on the telephone industry and government. 9-1-1 has been funded by a multiplicity of ways including line items on telephone bills, charges placed on information calls over a set number, and general government funds to name a few. The items which government has paid for include dedicated 9-1-1 trunks, selective routers, ALI databases, and such other items which were solely used for 9-1-1. Government did not pay for other items in the telephone public switching network which were used and shared by 9-1-1 and for other items in the telephone public switching network which were used and shared by 9-1-1 and telephone users in general, such as end offices, switching tandems, databases, carrier systems, etc.

The prevailing attitude of the wireless carriers is that there must be a total cost recovery mechanism which equates to the suggestion that this is tantamount to a federal mandate that requires public funds to pay for location systems. Until this attitude can be adjusted, the only person who is suffering is the citizen whose legitimate expectation is that when their life or property is endangered their government will respond.

One possible solution is for wireless carriers to view location services as a whole new business opportunity for wireless services. This service can be compared in many ways with telephone service. Telephone services allow us to communicate over a distance, while location services allow the general public and others, such as PSAPs, to know exactly where we are. Albeit they are different... but they are both services and services which can truly generate revenue. No one ever asked to expected the public sector to pay for any part of the shared telephone network, so why would anyone expect the public sector to pay for shared location systems? Public funds should only be utilized to pay for those items which are isolated and used for 9-1-1 only, such as the dedicated 9-1-1 circuits between the location systems and the dedicated trunks between the wireless carrier and the 9-1-1 tandems. Public funds will also have to pay for modifications of PSAP equipment to accommodate wireless information and for the training of operators to process the information once it is received. These costs will equate to millions of dollars over the next five years. If local governments also have to be responsible for the funding of the carriers equipment this cost quickly multiplies.

As local governments and wireless carriers continue to debate on cost recovery legislation the only person who is suffering is the citizen. In Omaha we asked for Phase I implementation a year ago and we are no closer now than we were then.

One area of particular importance and relevance to this discussion upon which I would like to comment is the radio spectrum. Without adequate access to this finite resource, wireless 9-1-1 calls are not possible. In the wake of last year's Balanced Budget Act, the FCC promulgated a ruling under which portions of the spectrum could be reallocated to state and local governments specifically for public safety communications purposes. We applaud the action by Congress and urge that the FCC move forward without delay.

We regret, however, that the new law is almost certain to preclude most of the nation's major metropolitan areas from having access to any of this new spectrum and could prevent at least half of the nation's eligible police, fire, and emergency response agencies from access. There are two, serious problems. First, the law created a loophole so large that we doubt the nation's largest cities will ever be able to apply for this new spectrum.

Secondly, because the FCC rules require cities to purchase the new equipment as a precondition to applying for the new spectrum and because the one-time costs of purchasing that equipment can be prohibitive; we are deeply concerned that too many public safety agencies will not be able to afford access to this new capacity. Without these frequencies they will not be able to make use of advanced public safety technologies. This includes wireless phones used by emergency services personnel. We would strongly urge you to address that problem immediately, as well as to address the critical need for public safety spectrum for interoperability and long-term public safety needs as presented to the Congress two years ago by the Public Safety Wireless Advisory Commission (PSWAC).

NLC believes that federal assistance that enables local governments to improve public safety services, including through enhanced 9-1-1 services and other advanced public safety technologies, will always be a key component to our ability to respond to emergencies.

We would urge the federal government to ensure that all areas of the country have access to modernized 9-1-1 technology for emergency use. Many cities and towns still do not have timely response services because the 9-1-1 technology is not available. Also, many local 9-1-1 systems are antiquated and overburdened by barrages of non-emergency calls which divert attention from real, life-threatening emergencies.

Mr. Chairman, I would now like to direct my remarks to another area upon which I have been asked to comment: cellular tower siting.

Clearly, ensuring the safety of our constituents will always be of primary importance to city and town leaders. We believe that local governments around the country are working cooperatively with the wireless industry to ensure that cellular and PCS antennas and towers are sited in an efficient and effective manner, and to ensure that all of the concerns of a community are addressed in making determinations about siting these facilities.

As I mentioned earlier, more than 50 million Americans use personal wireless services and that number is expected to grow to more than 100 million by the year 2000. This growth reflects the importance of these services to residents and businesses, both as a tool to ensuring public safety and to encouraging economic development in cities and towns.

However, the influx of new wireless providers also poses significant challenges for local governments as we perform our traditional zoning and land use functions. In particular, the tremendous growth in the wireless services market has caused the demand for new facilities to site antennas to grow rapidly. In many areas, local officials can expect to see as many as eight providers seeking facilities to site their antennas in cities and counties in the next year. We understand that the number of such antennas could grow in the United States by more than six times to 120,000 by the year 2000.

While ensuring public safety is of critical importance to NLC's members and to our mutual constituents, many citizens have expressed concern about the proliferation of these new antennas and towers in their neighborhoods. And, many of these concerns are also related to public safety. For example, residents worry that 200 foot towers may present safety hazards in bad weather such as ice storms or hurricanes. They are unhappy about the prospect of locating unsecured towers near school playgrounds. Finally, they do not want to see large, unsightly towers dispersed throughout the community, cluttering their landscape and reducing their property values.

As local elected officials, we are faced with the challenge of balancing the demand for wireless service with the concerns of our constituents—all of their concerns. This includes both ensuring that an emergency 9-1-1 call can be received by emergency operators and dispatchers, as well as making sure that towers are located and secured in safe manner. We believe we working toward meeting both of these challenges.

Many cities and counties have amended and continue to amend their zoning ordinances to facilitate the growth of wireless systems to meet the needs of residents and businesses, while at the same time addressing the public's concerns with these facilities. Localities have found that working in partnership with providers is an effective way to deal with potentially conflicting interests of siting cellular and PCS towers.

It continues to remain our strong belief that any federal preemption—either by the FCC or by Congress—over essential and historic land use and zoning authority would be both inappropriate and unnecessary. Over the past year, several industry groups have filed petitions before the FCC seeking to preempt local government land use and zoning ordinances regarding the siting of various types towers and other facilities. NLC and other groups representing state and local governments

have opposed these petitions and will continue to oppose any attempts by Congress or the FCC to preempt or to substantially regulate local zoning authority.

We were encouraged to hear that this new Commission, chaired by William Kennard, does not advocate the preemption of local zoning authority as a means to addressing many of the issues that have been discussed here today. In fact, the Chairman and other Commissioners have expressed to local elected officials their belief that the FCC should only consider preempting local zoning authority as a very last resort. Instead, the FCC is encouraging local elected officials and industry to meet to try to work out at least some of their differences, and to offer some possible solutions. It is my understanding that these discussions are going on between representatives of NLC and industry even as we speak. We hope that Congress also views preemption of essential local zoning and land use authority as a very last resort. We believe that both industry officials and local government officials have a responsibility to our citizens and to our consumers to educate one another about their frustrations and to work together to come up with effective solutions. NLC believes that discussion and education, rather than litigation or federal preemption, will produce results that ensure that public safety and other community concerns are effectively addressed.

I appreciate this opportunity to be here today and look forward to answering your questions.

Mr. TAUZIN. Thank you very much. We'll now turn to the Administrator of the National Highway Traffic Safety Administration, Mr. Ricardo Martinez, for his statement.

STATEMENT OF HON. RICARDO MARTINEZ

Mr. MARTINEZ. I thank you, Mr. Chairman, and members of the committee. I am Dr. Ricardo Martinez, Administrator of the National Highway Traffic Safety Administration. I want to say I am not going to repeat a lot of the numbers that have been used, but I do want to offer a different perspective, that of the National Highway Traffic Safety Administration.

Let me start by pointing out, as a public safety issue, that in our view black angus cows are actually poorly designed for highway use.

You are going to hear from constituents today who are talking about the E911 issue. We believe that we are at a crossroads on this communications issue. We have been listening to our constituents on this subject for several years now.

I'd like to talk a little bit about history. It's worth noting that EMS is a relatively recent development. Before the middle of the 1960's, there were very few organized ambulance services in this country. In most places crash victims were taken to the hospital in the back of a car or in a town hearse which was the only vehicle you could lay someone in down flat.

In 1966, the National Academy of Sciences published a book called "Accidental Death and Disability: The Neglected Disease of Modern Society." What it pointed out was that half a world away in Vietnam soldiers got medical care faster than victims of car crashes in our own society. We looked and saw that more people were dying in car crashes in our society than were dying in Vietnam, each and every year.

Thus, Emergency Medical Services actually arose because of car crashes. I can tell you that this is true, because during EMS's infancy I drove an ambulance, and all I had at that time was a First Aid Card. In fact, our communications systems consisted of a bag of nickels. You know in Louisiana it was a nickel for a phone call, and we would stop and make our pay phone calls to hospitals.

This book revolutionized the way we view and manage injury in America, but building an effective communications infrastructure was really the foundation for EMS. The EMS forefathers needed to connect the public with the ambulance, and the ambulance with the hospital. In fact, they recommended, in 1966, a single emergency number to access the system. Today, communications is a lifeline for EMS to function effectively and efficiently.

Thirty years later, America has a modern, dynamic EMS system that continues to evolve. We have really come a long way since the bag of nickels. However, only 3 years ago EMS seemed adrift in a shifting landscape of health care reform. Like every other area of health care, EMS was concerned that its voice was often muffled or omitted, in the ongoing health care dialog.

Several national organizations asked for our help. We agreed that EMS needed a better vision for the future. We brought together hundreds of EMS professionals and asked them three hard questions: Where are we now? Where are we going? and How do we get there? The product of that initiative, which many of my fellow witnesses participated in, was the "EMS Agenda for the Future" which will serve as our guiding principle for the next 30 years.

The EMS community envisions their future role as a linchpin joining public health, health care, and public safety together. EMS is the intersection—the only intersection between these basic support systems. The "Agenda" lays out three objectives for achieving this change: first, build bridges through relationships in the community. Second, develop an infrastructure, which we can communicate and operate more efficiently; and third, develop the tools and resources.

Let me go back to infrastructure development. The EMS community emphasizes it as particularly critical. Of the top 10 recommendations of the EMS community, two of those are for 9-1-1—completing the implementation of 9-1-1 and implementing wireless Enhanced 9-1-1 or E9-1-1.

We've given you a paper summarizing the opportunities for developing a modern, end-to-end communications infrastructure. The other panel members will mention the challenges of implementing E9-1-1. Now, I'd like to highlight a few examples of how this technology can expand America's safety net.

Right now 90 percent of America is covered by 9-1-1, and 85 percent is covered by E9-1-1. If basic 9-1-1 is our safety net, then E9-1-1 is the soft air cushion right below that stops the fall when the net breaks. I can tell you from experience, the safety net does break, and automatic location is important.

Back when I was practicing emergency medicine, paramedics had rushed one of my co-workers into the emergency department, near death from shock. Today she is alive because her young child dialed 9-1-1. The child was too young to give his address or even his phone number, but the E9-1-1 system worked. The dispatcher knew where they were and sent medical help. If that call had been on a wireless phone, the dispatcher would not have known their location, and it is unlikely they would have responded to her needs.

We need E9-1-1 for wireless phones. Almost one-third of all calls today are from wireless phones. Today we can make the call, but

we can't locate the caller. It is ironic because, according to an industry survey, safety is the No. 1 reason Americans buy wireless phones.

This technology will enable us to skip links in the chain of survival and deliver treatment within the golden hour. In the ER we have a phrase that sums up the importance of this golden hour, and that is, "Time is tissue." The communication link can serve as a foundation for advanced post crash technology. Since 1992, we have been developing the concept of Automatic Crash Notification or ACN that enables vehicles to automatically place the call for help following a crash to provide location. We have pilot tested this technology in a fleet of vehicles in Erie County, New York. Our findings validate that ACN can be successfully integrated into an existing emergency response system.

You can buy this technology off the car dealer's floor, as you said. We think we're going to see growing market strength for this technology, but to bring the price down we have to have an end-to-end system to accept the call. Otherwise it will have to be totally car-based. That would be very expensive, right now about a $1,000 per vehicle.

We have integrated the concepts into the Intelligence Transportation System architecture and are working with the Society of Automotive Engineers to develop the in-vehicle system protocols.

Let me conclude by saying that there is broad support and cooperation from all the stakeholders: emergency providers, public safety professionals and communications industry. Thirty years ago Congress stood at a crossroads and breathed life into the concept of Emergency Medical Services and forever changed the face of America. Each and every day lives are saved because of those Congressional actions.

Today we are standing at another crossroads, looking at the potential for positive change. Congress now has an opportunity to breathe life into a concept of an end-to-end system that will serve as a foundation for Emergency Medical Services for the 21st century—because emergencies occur where there are people, not necessarily where there are phones.

We stand beside you, ready to work in every way we can to help improve America's safety net. Thank you.

[The prepared statement of Hon. Ricardo Martinez follows:]

PREPARED STATEMENT OF HON. RICARDO MARTINEZ, ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Chairman Tauzin and Members of the Committee, I am Dr. Ricardo Martinez, Administrator of the National Highway Traffic Safety Administration (NHTSA). Accompanying me are Dr. August Burgett, Chief of our Light Vehicle Dynamics and Simulation Division, and Dr. Jeffrey Michael, Chief of our Emergency Medical Services Division. It is a pleasure to be here to testify about the Administration's involvement in promoting highway safety as it relates to emergency 9-1-1 services.

I think it is worth noting that emergency medical services (EMS) are a recent development, a phenomenon of the latter part of the twentieth century. In 1966, the National Academy of Sciences and the National Research Council published *Accidental Death and Disability: The Neglected Disease of Modern Society.* The publication pointed out that our soldiers half a world away in Vietnam were receiving better care than the victims of car crashes one block from local American hospitals. These pages revolutionized the way we view and manage injury and led to much of what we now take for granted in emergency medical services. Emergency services

were among the safety programs originally included in the Highway Safety Act of 1966, one of the three major statutes administered by NHTSA.

An effective communication infrastructure was a central component of EMS from the very beginning. Fast and reliable communication links were recognized as essential for connecting the ambulance with the hospital and providing the link from the public to emergency responders. The *Accidental Death and Disability* authors, in fact, recommended a single emergency access number. Since their introduction in Alabama in 1968, the numbers—nine, one, and one—have become synonymous with the word "help." In 1973, the White House Office of Telecommunications issued a national policy statement encouraging nationwide adoption of 9-1-1 and established a Federal Information Center to assist with local planning and implementation. In these early years, 9-1-1 grew at a rate of up to 70 new systems annually.

Thirty years have passed; America now has a sophisticated, dynamic EMS system that continues to evolve together with changing technology in a changing environment. Yet only three years ago, EMS seemed adrift in the shifting landscape of health care reform. Concerned with the lack of EMS involvement in the ongoing health care dialogue, NHTSA and several national EMS organizations brought together hundreds of front-line providers, state and local representatives, and national EMS leaders. We asked them three hard questions: Where are we now? Where are we going? How do we get there? The product of that initiative was the *EMS Agenda for the Future (Agenda),* a new vision for EMS that will serve as our guiding principle for the next thirty years.

Emergency service providers currently spend much of their time reacting to cases that fall between the cracks in today's isolated public safety, health care, and public health systems. The *Agenda* envisions EMS as the linchpin joining these services into an integrated community health care network. As originally envisioned in 1966, a continually evolving communication system is essential to maintaining rapid, reliable emergency access through 9-1-1.

The *Agenda* lays out three objectives: first, EMS needs to build bridges through relationships with our community health care partners; second, EMS needs to develop new tools and resources that facilitate innovative roles and skills; and third, EMS needs to develop an infrastructure upon which it can communicate and operate more efficiently.

As part of NHTSA's continuing efforts to inform the EMS community, we published *Emergency Access: Extending the Nation's Emergency Medical Safety Net.* This document summarizes some of the challenges facing the development of a modern end-to-end emergency communications infrastructure. Copies of this document have been provided to your staff.

Creating a comprehensive EMS infrastructure means building a system that connects all those in need with EMS services. The top priority in this effort is an effective communications system. In that regard, the good news is that just ten years ago, only half of the U.S. population was covered by 9-1-1 service. Today, 90% of Americans can reach emergency care by dialing the same three digit number. *Over a quarter of a million Americans use 9-1-1 to call for help every day.* Furthermore, the advent of enhanced 9-1-1 (E9-1-1) has added the ability to automatically track the caller's phone number and location. Now help can be sent even if the caller is confused, unable to describe where they are, speaks a foreign language, or is cut off. *Presently, about 95% of those with 9-1-1 coverage on their home or business phone have E9-1-1 service.* The location and caller information provided by E9-1-1 is critical for public safety. As the *Agenda* points out, "the single most important information provided in an emergency call is the location."

Back when I was a practicing emergency physician, one of my co-workers was rushed through the swinging doors of the emergency room near death from hemorrhagic shock. She is alive today because her young child dialed 9-1-1. He couldn't give the dispatcher his address or his phone number, but the E9-1-1 system worked. The dispatcher knew where they were and sent medical help. This story is repeated somewhere every day. However, an increasingly mobile society and new technologies are creating new concerns about the reliability of our emergency medical safety net. If the call had been made on a wireless phone, the dispatcher would not have known their location, and it is unlikely that emergency responders would have found my colleague.

We live in a mobile society and many of us sitting in this room have a least one wireless phone. The current infrastructure unfortunately does not support wireless E9-1-1. Yet, according to a survey by the Cellular Telecommunications Industry Association, safety is the number one reason Americans buy portable phones. Thirty years of experience has conditioned us to expect help on the other end of the line no matter when or from where we are calling. In fact, almost 84,000 9-1-1 calls are

made on wireless phones each day. *About one third of all 9-1-1 calls are now made by wireless phones.*

Wireless E9-1-1 will expand the Nation's emergency medical safety net. This technology will enable us to skip links in the chain of survival, improving the opportunity to deliver lifesaving treatment during the Golden Hour following a serious injury or medical emergency.

The communication link created by wireless E9-1-1 will have other benefits. NHTSA has developed a program entitled "First There, First Care" that is educating the American public on lifesaving techniques to be performed at a crash scene. Wireless technology allows bystanders to stay with the sick or injured, instead of having to leave the scene to find a telephone. Emergency dispatchers can coach bystanders on providing lifesaving care until EMS arrives. We are working with EMS and public safety groups to educate motorists and turn bystanders into care givers.

The communication link can also serve as a foundation for advanced post-crash technology. Since 1992, NHTSA has been developing the concept of Automatic Crash Notification (ACN) that enables vehicles to automatically place the call for help following a crash. We have pilot tested this technology in a fleet of vehicles in Erie County, New York, to assess its feasibility. Our findings indicate that ACN can be successfully integrated in an existing emergency response system. Several auto manufacturers have built a basic ACN system into some of their more expensive model lines. We have integrated the concepts into the Intelligent Transportation System architecture and have been working with the Society of Automotive Engineers to develop the in-vehicle system protocols.

Once the link for ACN is established between the vehicle and the emergency dispatcher, the door will be opened for even more advanced technologies. We are developing an injury prediction program that, when completed, could automatically collect information about the crash and predict the probability of severe injuries. Data collected from the crash would include speed, collision direction, and the number and age of occupants. This would allow emergency dispatchers to make the best decisions about the type of help to send and the best hospital destination for the crash victim. The information could also be forwarded to the hospital or trauma center to prepare them for patient arrival. These technologies are promising and deserve further testing and development to confirm their validity and effectiveness. ACN and advanced injury prediction promise great benefits in reducing post-crash mortality and morbidity, but they require an end-to-end system to reach their full potential.

Estimating the lifesaving potential of these technologies is difficult due to limited and uncertain data about exact crash times and the cause and time of crash deaths. Several previous studies have reported optimistic estimates, but have been based on a number of questionable assumptions. Our estimates, based on the most objective available data and with medical review, suggest that reductions in the time from crash to arrival of emergency responders could save approximately 300-600 lives per year.

If we are to connect every citizen to rapid, reliable emergency care, we will need an end-to-end communication system. Making this a reality will be a challenge. We did not connect America to land-based E9-1-1 overnight. This process has been going on for 30 years and is not yet complete. Countless groups and thousands of individuals have made 9-1-1 the success it is today. I would especially like to commend the tireless work of the Federal Communications Commission (FCC), the National Emergency Number Association, the Association of Public-Safety Communication Officials, and the Association of State 9-1-1 Administrators.

Implementing wireless E9-1-1 will be an even larger challenge. The current system is extremely diverse. Levels of 9-1-1 implementation are inconsistent, as are priorities for system upgrades. While most states have complete or almost complete E9-1-1 coverage, others lack even basic 9-1-1 service over large areas of their state. Furthermore, as we all know, wireless technology is rapidly changing.

Creating a seamless network will require a common vision. A nationwide emergency medical safety net means that every American has access to emergency care through E9-1-1, independent of their location or what type of phone they are using.

We need broad support and cooperation from all of the stakeholders--emergency medical providers, public safety professionals, and the communications industry. The public safety community and the wireless industry identified E9-1-1 as a challenge early on and have already started the dialogue. NHTSA, along with the FCC, brought these groups together for a wireless E9-1-1 "Call to Action" Conference last year. Following this Call to Action, these public safety and health groups joined in an alliance to promote the concept of the end-to-end system. Several of these groups are represented here today.

Mr. Chairman, let me state that each person sitting next to me carries a valuable perspective to the table. We built today's EMS system by bringing people with diverse perspectives together. We can form a nationwide emergency medical safety net in the same way, because emergencies occur where there are people, not necessarily where there are phones. I look forward to working with the Committee to improve the emergency medical safety net for America.

Thirty years ago, Congress stood at a crossroad, breathed life into the concept of emergency medical services, and forever changed the face of America. Each and every day, lives are saved because of those Congressional actions. Today, we are standing at another crossroad, looking at the potential for positive change. Congress now has an opportunity to breath life into the concept of an end-to-end system that will serve as a foundation for emergency medical services of the 21st century. We stand ready to work with you in every way we can.

Mr. TAUZIN. Thank you very much, Doctor. We will now recognize Dr. Stephen Hargarten, the Director of the University of Wisconsin Medical Center, for your testimony sir. Again, all of your written statements are part of the record. So if you would summarize for us, Doctor.

STATEMENT OF STEVEN HARGARTEN

Mr. HARGARTEN. That's correct. Thank you, Mr. Chairman. I appreciate the opportunity. I have submitted written testimony. Member of Congress and staff members, I will depart from my written testimony, be brief and to complement the testimony already provided by Sue Hoyt and Dr. Martinez.

I am an emergency physician, have been practicing for over 20 years in Wisconsin. I currently chair the Department of Emergency Medicine at the Medical College and direct the Emergency Department for the State's only Level 1 Trauma Center.

Let me put you in context with what Dr. Martinez was saying. In practicing emergency medicine during the days when there was a hearse, when there was actually a policy ambulance bringing in patients, little was done. We have now benefited from a coordinated training of these professionals, a coordinated response, that brings patients to my emergency department so that I can act in a timely fashion and bring the technology wonders that we have at our disposal today.

But there are limits, and the limits that I see now that need to be addressed is time, time to get this patient to a place of definitive care, to the resources that I have with my colleagues in emergency nursing, Sue Hoyt and her professionals, my colleagues in emergency medicine and trauma surgery; to be able to get that state-of-the-art treatment in a timely fashion.

And what I see is so exciting about this technology that's here now and to be able to be applied now, is to take that element of the disease that I can't do much about, and time, as was mentioned, time is tissue. To me that's the most frustrating part. I can't affect that. With this technology it can be effective, and those patients can get to me sooner so that I can do those life-saving interventions, so those EMTs who are trained can get to those patients sooner and apply those life-saving measures of airway control, breathing and circulation, the ABCs.

So I think we have a golden moment to affect the golden hour, right now to affect this change and to get this technology out there, and to affect this in a truly partnership approach, which I think is very exciting. From my vantage point—we've talked a lot about

the benefits to patients. I see benefits to me as a practitioner, to affect this with my patients and to bring this home and really save lives. Thank you.

[The prepared statement of Steven Hargarten follows:]

PREPARED STATEMENT OF STEPHEN HARGARTEN, CHAIRMAN, DEPARTMENT OF EMERGENCY MEDICINE, MEDICAL COLLEGE OF WISCONSIN

Thank you Mr. Chairman.

Mr. Chairman, and members of the Committee, thank you for providing us with the opportunity to come and speak with you about this important issue. I will be brief in my remarks because others will address many of the critical points. Ms. Hoyt has done a superb job in outlining the issue for you. I know your time is at a premium.

Whenever I come to Washington, I am struck by the size of the job of policymakers and the limited amount of time you have to decide on important issues. As many political insiders try and remind those of us who come to ask you for something, "time is one of the representatives most valuable commodities."

However, the predicament of limited time is a key reason why you may have a keener insight to why we are here today, and what we are asking you to do—because time is what we are talking about.

As an emergency physician, time is frequently my enemy. I am continually fighting to shorten the time it takes to get care to an injured person. When someone suffers a traumatic injury the clock starts. In emergency medicine there is what is known as the "golden hour." If we can get definitive care to that injured person within 60 minutes of the time the injury has occurred, the chances for the victim's survival greatly increase. If we don't get care to them within that first hour, the odds of the person dying go up dramatically.

Mr. Chairman, you and the committee have a rare opportunity to help us decrease the time to care and increase the chances for survival by waiving us the tools to get that critical care to patients more quickly. You have the opportunity to improve the emergency medical service system to a greater degree than any action since its inception during the 1960's.

And the technology exists now—today. You have heard, and you will hear from others, how this can be done—the ability of the wireless telephone to serve as a beacon to locate people needing help, and the technology that allows us to determine the probability of injury type and therefore what kind of help to send.

Mr. Chairman, I know that as our nation's public health policy leaders you and the committee are under tremendous pressures every day to make choices effecting the lives of Americans. Many people and groups come to you asking for something—especially for funding. I know there are larger issues of telecommunications policy and of course there is always a need for additional funding. What I can give this committee today is a simple equation and a firm promise.

If you provide us with these tools we will save more lives. It is that simple.

Are there important research projects going on with respect to future transportation safety? Yes. There are worthy efforts now underway with respect to smart cars and intelligent vehicles. These are good projects that will help make our transportation system more efficient and provide improved injury prevention practices. Someday, well into the future, I know these efforts will greatly improve our lives.

But the technology we are talking about here today already exists. It doesn't need to be invented. In the few short months that the ComCARE coalition has existed there has been a tremendous response from EMS professionals. Again, the reason is because of time. EMS professionals are a pretty practical bunch. They are in the business of life and death under extreme circumstances so they don't have a lot of time to theorize about "what ifs." When ComCARE tells EMS people what they are trying to do with E911 and ACN, they are supportive. Then, when we tell them that we can do it today, if we had the funding and the cooperation to implement it, they become incredulous. They are skeptical that the screen we showed you earlier actually is ready for them to use. "Why can't I have that now?" they ask. The question is the question asked by people who see the effects of delayed definitive care for injuries in our country today.

Mr. Chairman, much of my professional time outside of the hospital is spent on advancing the field of injury prevention. Both with regard to crash victims, victims of crimes and other injured people—the best way to help them is make sure they never come through the doors of the emergency department. Trauma is like any other disease—attack the cause and you attack the disease.

Today for the most part, we are talking about secondary injury prevention. We are talking about preventing death after the initial crash event. The crash, or some other terrible event has occurred. If any of you have been injured in a car crash, or some other trauma—or if any of you have been wounded in combat—you know that the only thing that matters is how soon you get help. How many times do you hear of injured people being told to hang on—help is almost there?

Mr. Chairman, tomorrow night I will be in the emergency department, in my scrubs, as I am sure Sue Hoyt will be at some point this week. This committee room will seem like a million miles away. Sue and I will be in different hospitals, in different states, thousands of miles apart from one another. But we will both be looking down at someone gravely injured. And the first thing that some EMS professional will be telling us is what happened and when it happened. All of the decisions we make will be made based on the answers to those two questions.

Now this committee has the power to change the answers to those two questions. The system we are asking your help to implement tells us where this person is located. That changes the "when." It tells us what kind of help to send—that changes the "what." Once again the equation is simple—the improved system saves more lives.

Mr. Chairman and members of the committee, as I said earlier, you have tremendous pressures with respect to the policy decisions you make. I know there are consequences to the decisions you make which you must weigh carefully. There are people here today from other government agencies who I am sure can put new funding to very good use—maybe even making safer workplaces, or improving services to their users. But there are not many opportunities like the one that is before this committee. You have the means to bring potentially new funding to a life-saving communications system desperately overworked and in need of help. The revenues would come in part from the very devices that are causing much of the overload. And the technology is currently available. I hope you take advantage of this tremendous opportunity.

Let me also suggest one other action to you. All of you as representatives know your district thoroughly and visit businesses and groups there regularly. I urge you to visit the local emergency department in your district. Arrange to take a tour of the emergency department one Friday or Saturday evening when you are back in your district. Sue Hoyt or I can help arrange it with your district staff. Talk to the nurses and doctors about this issue. Also, visit your local fire station. Talk to the officers and firefighters about what this system could mean to them in terms of their work. Watch their reaction when you tell the working firefighter, the emergency nurse, or the emergency physician that these tools are available now—they don't have to be invented.

You can help them. You can help all of us. We know it isn't easy, but we know there has never been a better opportunity. This, in effect, may be this committee's "golden hour" of opportunity. Give us these tools to fight, and I promise you, on behalf of every EMS professional, we will save more lives.

Thank you Mr. Chairman.

Mr. TAUZIN. Thank you very much, Doctor. We'll now turn to Mr. George Heinrichs, President and CEO of SCC Communications Corporation, for your statement, sir.

STATEMENT OF GEORGE HEINRICHS

Mr. HEINRICHS. Good afternoon, Chairman Tauzin and members of the subcommittee. I am George Heinrichs, the President and CEO of SCC Communications of Boulder, Colorado. I appreciate the opportunity to testify today at this timely hearing on wireless Enhanced 9-1-1 services. I think I sense a lot of common ground in the testimony you've heard today, and I'll not repeat things you've already heard, but if there's one message that's heard I think it's everyone is united that this is a very real problem that we face in our industry.

I spent 10 years in public safety working in the field as an EMT, as a 9-1-1 dispatcher and as a law enforcement officer; left there and founded the company that I now work in. It started with two people. We now have 270 employees. I think we're a successful

small business and work in this industry. Our customers are wireline and wireless carriers and those customers throughout the U.S.

There are a couple of points that I would make for the committee: One is that there is substantial disparity today in wireline versus wireless service, but I don't think that the citizens really understand that. When they pick up a phone and dial 9-1-1 they're dialing 9-1-1. They expect the same level of service and depend on it. Their lives depend on it.

There's one other number I thought was particularly interesting, and that is that you've heard the number of calls for 9-1-1 or to 9-1-1 from wireless phones as increasing rapidly. One of the numbers I find that's shocking is that about 25 percent of the people who call cannot describe their location.

So when we talk about speed of response, we are talking about the ability of a public safety dispatcher to try to sort out what the facts are to send someone. And when you talk about the call volumes like the Honorable Mayor of Omaha did here, I've heard numbers in one city where the average traffic accident 10 years ago caused five calls. Today they receive in excess of 100 calls. Twenty-five of those people cannot tell you where they are.

We've created a huge—on one side wireless has been an incredible life-saving tool—we should never forget that, but its effectiveness is continuing to blossom, and we need to reinforce the infrastructure.

There are really four things that need to happen: PSAPs need technology updates to take full advantage of this. Government and industry need to put cost recovery in place, however that best works. Liability standards need to be the same. We have great disparity in some locations now, and frankly we need to make this a fair and level playing field to inspire all the players to come to the table with their best solutions and to do that in a fair way.

And I heard the term "dead zone" earlier. I'd encourage you to really attach the meaning to that concept that I think it holds. They're dead zones. If you're there and you need help and you dial 9-1-1, you get nothing. And we need to help the wireless community solve those problems.

You can be certain there are market forces to push in that direction but there are a couple of new things that are coming in 9-1-1 that we're excited about. We're seeing other companies do it, and I wanted to give the committee some brief insight. There is more yet to come.

One program that's being developed, and I know there's some activity in Louisiana, Mr. Chairman, to do this, to do emergency warning evacuation, which is essentially a program to use some of the 9-1-1 infrastructure components to notify in geographically specific areas target audiences and give them messages about emergencies, which is I think a really powerful tool.

Subscriber data in 9-1-1 is also possible, the ability to put your own medical information and pertinent data about the person in the record so when they dial 9-1-1 that information is available, whether it's how to find someone in a home. Maybe there's someone who needs assistance in evacuation.

In any case, time is everything. I think a lot of people view 9-1-1 as the system that's already done. I tell you, our work's not done. Our work is continuing, and I am really excited that you're having this hearing and moving forward. Thank you.

[The prepared statement of George Heinrichs follows:]

PREPARED STATEMENT OF GEORGE HEINRICHS, PRESIDENT & CEO, SCC COMMUNICATIONS CORPORATION

Good afternoon, Chairman Tauzin and members of the Subcommittee, I am George Heinrichs, President and CEO of SCC Communications Corporation of Boulder, Colorado. I appreciate the opportunity to testify at today's timely hearing on wireless enhanced 9-1-1 services.

After spending more than ten years in the public safety profession, working as an emergency medical technician, a 9-1-1 dispatcher, and a law enforcement officer, I decided to start my own company. In 1979, I co-founded SCC which is now the largest and fastest growing 9-1-1 services and technology company in North America. We have expanded from a two-person start-up to a company that employs over 270 people. SCC provides products and services for both wireless and wireline carriers and their customers throughout the United States.

For years I have played a role in the implementation of wireline enhanced 9-1-1 and have directly witnessed situations where it made the difference between life and death. While enhanced 9-1-1 is now commonplace on the wireline side, it is currently in its infancy on the wireless side. As others have pointed out, when a person dials 9-1-1 from his wireline phone, the emergency call taker or dispatcher receives data displaying both the phone number and address from which the call was placed. Yet right now, when the same call is placed from a wireless phone, the emergency operator receives no identifying information, such as a call back number or location. Calls are not necessarily routed to the appropriate jurisdiction. If there is a disruption in service or if the caller passes out from an injury, the emergency dispatcher has no way of reconnecting with that caller.

Industry estimates put the wireless 9-1-1 call volume at 83,000 calls per day. Through our experience in this field, we estimate that approximately 25 percent of these callers cannot accurately describe their location. This slows dispatch and response times, and makes it difficult to detect duplicative calls from the same incident. One major 9-1-1 center estimates that over the past decade, wireless calls to 9-1-1 have grown in number from 5 calls per accident to more than 100 calls per accident in some cases. When a fourth of these callers cannot describe their location, you have a problem.

Wireless E9-1-1 is a much needed public safety service. In many cases it's the lifeline between our citizens and the emergency resources they require. Concerns such as these led the FCC to its recent 9-1-1 rulemaking that wireless carriers must start providing improved 9-1-1 services this year and have E9-1-1 fully implemented by October, 2001. However E9-1-1 will not "just happen" because the FCC has ordered it. Having worked in both the public safety profession and the telecommunications industry, I can identify a number of challenges that both sectors have to overcome in order to provide effective E9-1-1 services to the public.

First, Public Safety Answering Points (PSAPs) will need to make technological upgrades so they can take maximum advantage of these new services.

Second, government and industry need to work together to develop cost recovery mechanisms for wireless carriers.

A third challenge is that wireless carriers and E9-1-1 service providers must be allowed to operate under the same 9-1-1 liability standards that apply to wireline phone companies and their 9-1-1 service providers. As I said before, my company provides 9-1-1 technology and services for both wireline and wireless phones. It doesn't make sense that the same service I provide one company is subject to totally different standards when I provide it to another company, just because the technology is different. However, as the law stands now, a different standard applies to each. Legislation is needed to encourage further development of our systems and to make it a fair and level playing field.

A final and fourth challenge is dead zones or areas where there simply is no wireless coverage. Wireless carriers need to be able to build out their networks so they can provide seamless coverage. E9-1-1 cannot help anyone if the emergency calls cannot go through.

While I have focused on challenges—there are also many opportunities in 9-1-1 to improve service to our citizens.

Our company and others are engaged in programs to develop and offer enhancements that go far beyond the current concepts in 9-1-1. To take full advantage of these advancements on the wireless side, too, the preceding challenges need to be addressed. Let me share some examples with you:

We have a program which we will be demonstrating in Colorado during the second quarter of this year to provide emergency warning and evacuation to citizens using the 9-1-1 infrastructure to make outbound calls to warn citizens of impending danger. This program will enable public safety officials to rapidly notify large numbers of people with specific voice, TDD, or fax messages about dangerous situations such as a hazardous material spills, flash floods, hurricanes, barricaded suspect with gun and many others. In each of these cases the system can make outbound calls to a targeted geographic area and deliver specific instructions. This service may be configured to deliver these messages in the subscriber's language of choice. The wireless location challenge must be addressed before mobile subscribers can be included in these important notifications.

We also are working with a number of different companies in our industry to provide a service which will allow citizens to put their own information in their 9-1-1 record and to request notification when 9-1-1 calls are made from their residential phone. This would allow citizens to flag special medical problems, select a language of choice, flag the location of people needing assistance in case of evacuation, and many other elements.

We need to build a twenty-first century emergency system that fully utilizes wireline and wireless technologies. Doing so will require bringing together the people who can facilitate an end-to-end system and raising public awareness of safety issues at both the federal and local levels.

The ComCARE Alliance is a group of folks who have thought through resolving these problems. Their agenda is a road map for overcoming challenges to wireless enhanced 9-1-1 as well as improving public safety services on the whole. ComCARE brings together all the parties who are necessary to make an end-to-end emergency communications system happen.

As a former public safety and law enforcement official, I understand the importance and the need for an end-to-end integrated communications system in support of public safety. Time is everything in emergencies. Quick responses by public safety and law enforcement officials can mean the difference between life and death for accident and crime victims. ComCARE will promote 9-1-1 as the universal emergency number so that our citizens can dial those three numbers—on any phone without regard for the underlying technology—in any emergency.

I have traveled around the world reviewing emergency telecommunications infrastructure. I can assure you we have the most advanced emergency telecommunication system I have seen. It provides a vital service to our nation. We must assure that its evolution tracks our rapid technological and business changes. The bottom line here is safety. Our nation's wireline and wireless telephone network is rapidly evolving both from a technical perspective and from a business view. It is a fundamental component of our national infrastructure. We depend on it every day for the people we love and for ourselves. We must pay attention and support its continuing evolution—our work is not done.

Thank you again for the opportunity to testify at today's hearing. I would be happy to answer any questions that you may have.

Mr. TAUZIN. Thank you very much, sir. Mr. Robert Miller, Chair of the Regulatory Committee of the National Emergency Number Association. Mr. Miller.

STATEMENT OF S. ROBERT MILLER

Mr. MILLER. Mr. Chairman and members of the committee, thank you for giving me this opportunity to address you on behalf of our State, and State and local emergency number officials who are charged with designing and implementing efficient and responsive emergency 9-1-1 networks that are so crucial to the livelihood of all Americans.

I am here today also as chairman of the Regulatory Committee of the National Emergency Number Association, the Nations' largest and most active association for 9-1-1 emergency network executives and representatives.

NENA's mission is to foster the technological advancement, availability and implementation of the universal emergency telephone number system, 9-1-1. In carrying out its mission, NENA promotes research, planning, training, and education for both wireline and wireless emergency issues.

I am delighted that we can spend some time today discussing the importance of wireless communications in our pursuit of lowering response time to emergencies and ultimately saving more lives of citizens across the Nation.

During my 20 years as an EMT and a certified paramedic and then 20 years as a Public Safety Communications Director, the last 8 of which were building and operating New Jersey's highly respected 9-1-1 system, I have found wireless technology advancements and growth to be one of the most beneficial advances to emergency networks, and more recently, one of the most challenging.

I have seen the positive contribution wireless has made to public safety and law enforcement entities by speeding response times to emergencies, enhancing their communications abilities, and creating more than 55 million safety sentinels who call in crashes, report crimes, and identify reckless drivers.

But coinciding with the skyrocketing number of wireless subscribers, is the upward trend of the number of wireless calls to 9-1-1. We already heard today about the increase. Last year we had 83,000 wireless calls. By the turn of this century it will be up to 130,000 per day, which is basically the same number of wireline calls.

But unlike most current wireline systems, 9-1-1 dispatchers and emergency officials have no way of knowing what number the caller is dialing from, and unless the caller can describe his location, no way of knowing where the caller is even located, placing serious pressure on these individuals and their systems. Calls take longer to process and multiple dispatches of emergency personnel must be made. A typical wireline call takes an emergency dispatcher only a matter of seconds to confirm the location.

In contrast, public safety operators regularly spend several minutes with each wireless call and still cannot ensure its accuracy. The worst cases have taken hours and some have even taken days. This increase the costs and stress on 9-1-1 operations. In addition, it imposes a series of costs to constituent agencies that rely on the information we provide and wastes precious time and scarce government resources.

Design and successful implementation of end-to-end emergency networks utilizing wireless technology is premised on knowing the location of the caller and the hope of new smart cars that will automatically notify an emergency center in the event of a crash and reveal its location on a computerized map. I have been there when emergencies come in. I have designed systems for receiving these calls. And there is nothing more frustrating than not being able to help the people who need it most because you can't find them. The benefits wireless communication can bring will be greatly enhanced if we can locate distressed callers quickly.

The Federal Communications Commission, in response to these problems, mandated that no later than 2001 all wireless carriers

will be required to incorporate wireless location technology into their networks. In their Report and Order, the FCC provided a two-step solution to this problem. Phase 1 of the Report and Order requires that by April 1 of this year carriers provide a callback number as well as the cell sector in which the call originated.

Phase 2 requires that by October 1, 2001, all carriers will be able to provide exact location to a precision of 410 feet 67 percent of the time. The FCC also said that these dates were contingent on the establishment of a funding mechanism for the cost recovery of Phase 1 and Phase 2 systems which would have to be provided for carriers to recover their costs for installing this new technology.

Last year, the State of New Jersey took that lead in conducting the Nation's first and only live 9-1-1 trial using that Phase 2 wireless location technology. Location receivers were placed at the participating carrier cellular call sites, and they were used only for 9-1-1 and programmed so that the only calls that they could locate and track would be 9-1-1 calls.

The receivers measured the time it took for each call signal to reach three or more base stations and through a process where triangulation actually measured each caller's position. Each location was placed on a graphic map, visually displayed on a 9-1-1 operator's screen so assistance could be dispatched immediately. In many cases, the caller's location placement on the map was displayed at the same time their voice could be heard through the phone line. And because the technology was based at the cell site, no changes were made to any of the subscriber's handsets.

The results were astounding. In the words of the Superintendent of the New Jersey State Police, Colonel Carl A. Williams, "It was nothing short of miraculous." Over the 100 day trial period we accurately located coordinates for over 3,500 wireless 9-1-1 callers. The trial proved that the technology exists, and it exists now and can be cost-effectively deployed today to meet the FCC's Phase 2 requirements.

Most important was the location technology was extremely helpful to our operations, making wireless calls routine. Sensational search and rescues like the South Dakota woman stuck in a blizzard for 40 hours never happened. We found this to be a tremendous tool. We took the word "search" out of "search and rescue." In the words of our State Attorney General, the Honorable Peter Verniero, "This system will save lives." We are now planning a second live demonstration which will cover a much larger area in southern New Jersey.

The ability to accept and display location data from wireless receivers does require upgrades on the part of the Public Safety Answering Points. Depending on the level of the technology and communications equipment already in place, these upgrades could range from minor to significant. Enhancing communications centers may require additional dedicated trunks, computer screens and mapping software, and system configuration changes to handle the 10-digits for the wireless phone numbers versus the traditional 7 digits from local wireline telephones.

Although additional upgrades will be still be needed to incorporate advanced features that we talked of today, such as the automatic crash notification and additional end-to-end wireless network

enhancements, New Jersey has taken an enormous step in upgrading all of our 230 PSAPs to handle Phase 2 technology.

Because of what enhanced safety networks mean to citizens, myself and others, including the FCC Chairman Kennard, have encouraged and want to make it easier for wireless carriers to install location technology as quickly as possible, well before the 2001 deadline. Through independent surveys, those taken by the wireless industry, consumers have said that they were not aware that they could not be located when dialing 9-1-1.

When they are informed of the fact, they said they want location just like they wanted on wireline.

Mr. TAUZIN. Mr. Miller, would you wrap, sir?

Mr. MILLER. I'll skip to the end and summarize. We have a tremendous opportunity to assist and to create incentives for the upgrading of our Nation's emergency networks to take full advantage of a mobile society assisted by wireless communications. The National Emergency Number Association and my office welcome the opportunity to review and comment on any legislation which may be proposed on this matter. In closing, I would like to thank you, Mr. Chairman, and the members of this committee for taking up this important issue. I look forward to your continued leadership as we go forward and would be delighted to answer any questions you might have.

[The prepared statement of S. Robert Miller follows:]

PREPARED STATEMENT OF S. ROBERT MILLER, CHAIR, REGULATORY COMMITTEE, NATIONAL EMERGENCY NUMBER ASSOCIATION

Mr. Chairman and Members of the Committee, thank you for giving me this opportunity to address you on behalf of our state and state and local emergency number officials who are charged with designing and implementing efficient and responsive emergency 9-1-1 networks that are so crucial to the livelihood of all Americans. I am here today also as Chairman of the Regulatory Committee of the National Emergency Number Association (NENA), the nation's largest and most active association for 9-1-1 emergency network executives and representatives. NENA's mission is to foster the technological advancement, availability, and implementation of the universal emergency telephone number system—9-1-1. In carrying out its mission, NENA promotes research, planning, training and education for both wireline and wireless emergency issues.

I am delighted that we can spend some time today discussing the importance of wireless communications in our pursuit of lowering response times to emergencies and ultimately saving more lives of citizens across the nation. During my 20 years as an EMT and a certified paramedic and then 20 years as a Public Safety Communications Director, the last eight of which were building and operating New Jersey's highly respected 9-1-1 system, I have found wireless technology advancements and growth to be both one of the most beneficial advancements to emergency networks, and more recently, one of the most challenging.

I have seen the positive contribution wireless has made to public safety and law enforcement entities by speeding response times to emergencies, enhancing their communications abilities, and creating more than 55 million safety sentinels who call in crashes, report crimes, and identify reckless drivers.

But coinciding with this skyrocketing number of wireless subscribers, is the upward trend of the number of wireless calls to 9-1-1. In 1994, the number of wireless calls to 9-1-1 per day totaled 50,000 nationwide. Last year there were over 83,000 wireless calls to 9-1-1 each day and by the turn of the century there will be over 130,000 per day—approaching the same number as wireline emergency calls. But unlike most current wireline systems, 9-1-1 dispatchers and emergency officials have no way of knowing what number the caller is dialing from, and unless the person can describe his or her location, no way of knowing where the caller is located—placing serious pressure on these individuals and their systems. Calls take longer to process and multiple dispatches of emergency personnel must be made. A typical wireline call takes an emergency dispatcher a matter of seconds to confirm the loca-

tion. In contrast, public safety operators regularly spend several minutes with each wireless call and still cannot ensure its accuracy. The worst cases have taken hours and some have even taken days. This increases the costs and stress on 9-1-1 operations. In addition, it imposes a series of costs to constituent agencies that rely on the information we provide and wastes precious time and scarce government resources.

Design and successful implementation of end-to-end emergency networks utilizing wireless technology is premised on knowing the location of the caller and the hope of new "smart cars" that will automatically notify an emergency center in the event of a crash and reveal its location on a computerized map. I have been there when emergencies come in. I have designed systems for receiving these calls. And there is nothing more frustrating than not being able to help the people who need it most because you can't find them. The benefits wireless communication can bring will be greatly enhanced if we can locate distressed callers quickly.

The Federal Communications Commission, in response to these problems, mandated that no later than 2001 all wireless carriers will be required to incorporate wireless location technology into their networks. In their Report and Order (Docket 94-102), the FCC provided a two-step solution to this problem. Phase I of the Report and Order requires that by April 1998, carriers provide a callback number as well as the cell sector in which the call originated. Phase II requires that by October of 2001, all carriers be able to provide exact location information to a precision of 410 ft, 67% of the time. The FCC also said that these dates were contingent on the establishment of a funding mechanism for the cost recovery of Phase I and Phase II systems would have to be provided for carriers to recover their costs for installing location technology.

Last year, the State of New Jersey took the lead in conducting the nation's first live trial utilizing Phase II wireless location technology. Location receivers were placed at the participating cellular carrier's cell sites. The receivers measured the time it took for each call signal to reach three or more base stations and through a "triangulation" process accurately measured each caller's position. Each location was placed on a graphical map visually displayed on a 9-1-1 operator's computer screen so assistance could be dispatched immediately. In many cases, the caller's location placement on the map was displayed at the same time their voice could be heard through the phone line. And because the technology was based at the cell site, no changes were required to the subscriber's handsets.

The results were astounding. In the words of the Superintendent of the New Jersey State Police, Colonel Carl A. Williams, "It was nothing short of miraculous." Over the 100 day trial period, we accurately provided location coordinates for over 3,500 wireless emergency callers. The trial proved that the technology exists and can be cost-effectively deployed today to meet the FCC's Phase II requirements. Most important was that location technology was extremely helpful to our 9-1-1 operators—making wireless emergency calls "routine." Sensational "search and rescues" like the South Dakota woman stuck in a blizzard for 40 hours, never happened. We found it to be a tremendous tool. We took the word "search" out of "search and rescue", and in the words of our state Attorney General, the Honorable Peter Verniero, "This system will save lives." We are now planning a second "live" demonstration which will cover a much larger area in Southern New Jersey.

The ability to accept and display location data from wireless receivers does require upgrades on the part of Public Safety Answering Points ("PSAPs"). Depending on the level of technology and communications equipment already in place, these upgrades could range from minor to significant. Enhancing communications centers may require additional dedicated trunk lines, computer screens and mapping software, and system configuration changes to handle 10-digits for wireless phone numbers versus the traditional 7-digits from local wireline telephones.

Although additional upgrades will still be needed to incorporate advanced features such as automatic crash notification and additional end-to-end wireless network enhancements, New Jersey has taken an enormous step for upgrading all of our 230 PSAPs to handle an extensive amount of Phase II emergency data information. We are now preparing to receive Phase II location data from all wireless carriers throughout our entire state.

Because of what enhanced safety networks mean to citizens, myself and others including FCC Chairman Kennard have encouraged and want to make it easier for wireless carriers to install location technology as quickly as possible, well before the 2001 deadline. Through independent surveys, including those taken by the wireless industry, consumers have said they were not aware that they could not be located when dialing 9-1-1 from a wireless phone, when informed of this fact they really wanted location technology, and they were willing to pay for it. The technology exists. There is sufficient demand. What is slowing implementation?

One important barrier to implementing location and other wireless safety advancements more quickly that exists today is that public safety centers and PSAPs in many states are coordinated by a variety of local, county, and state government and regulatory authorities. This makes it extremely difficult for private sector carriers to readily implement networks when they must work out individual technology and funding arrangements on a county by county, or worse yet, a city by city basis.

As wireless carriers in New Jersey are beginning to implement Phase I location technology, they are able to come to one place and know that every PSAP in our state had made the necessary technical upgrades to handle Phase I data. There were universal policies in place, and our network technicians had been trained to work with carrier and Phase I location technology vendors to successfully connect to their systems. The same is true as carriers are now considering how to implement Phase II.

The solution to this problem is not that hard. It means getting the right people around the table, just as we did in New Jersey and as is being done in some other states and like the ComCARE Alliance. A coordinated state-wide plan is the critical element. Key stakeholders including emergency service providers, emergency dispatch providers, public safety, fire and police officials, telecommunications authorities, carriers, and 9-1-1 officials all need to have input in the planning process. Each state needs to dedicate someone to coordinate this effort and bring a plan together that addresses the needs of each important piece of an end-to-end network.

A coordinated effort of PSAPs on a state or regional level would be more effective than carriers having to deal with tens or hundreds of PSAPs individually. We have done this in New Jersey, and it has proven to be a very efficient way to upgrade our network and deliver 9-1-1 services to callers. On the funding side, there needs to be a state or regional cost recovery plan in place.

To do this, I am not suggesting a new federal program with a top-down, one-size-fits-all approach. Nor am I suggesting that states order their local PSAPs around. We understand that the design and operation of emergency systems are best handled at the state and local level. We are simply looking for federal leadership to provide the encouragement and incentives for states to write and implement state-wide coordinated emergency network plans.

Specifically, our suggestion for federal legislation includes using the revenue from federal property wireless siting for block grants to the states for various wireless safety costs like E9-1-1 wireless location upgrades, and for Automatic Crash Notification research. Those grants will create strong incentives for coordinated state plans for E9-1-1 upgrades. Additionally, we can give wireless carriers the same legal protections as wireline telephone companies for E9-1-1, as New Jersey already does.

Our plan also calls for enforcing the President's Executive Order for siting wireless antenna on federal property. We all know that the call for help cannot go through in a dead zone. Wireless carriers call them "dead zones" for one reason. Those of us in public safety call them "dead zones" because the consequences for not getting through to help can be very grave. Wireless networks must be seamless.

We have a tremendous opportunity to assist and to create incentives for the upgrading of our nation's emergency networks to take full advantage of a mobile society assisted by wireless communications. The National Emergency Number Association would welcome the opportunity to review and comment on any legislation which may be proposed on this matter. In closing, I would like to thank you, Mr. Chairman and the members of this committee for taking up this important issue. I look forward to your continued leadership as we go forward and would be delighted to answer any questions you may have. Thank you.

Mr. TAUZIN. Thank you, Mr. Miller. We certainly will, in particular, want to ask you more about the New Jersey experiment. And finally on this panel, Mr. Edward Trout, Chairman of the American Trucking Association, Incorporated. Mr. Trout.

STATEMENT OF EDWARD R. TROUT

Mr. TROUT. Thank you, Mr. Chairman, and members of the committee. I am also the president and CEO of a small truck line in Omaha, Nebraska. We have a different approach today, Mr. Chairman. I am glad to be here to have the opportunity to speak to you on behalf of the trucking industry on an issue we consider a key ingredient in our desire to improve highway safety.

Our industry's commitment to highway safety is unparalleled. The initiatives we've taken in recent years, such as creation of a commercial driver's license, banning the radar detectors in commercial trucks, 1,000 percent increase in roadside inspections, we stepped up enforcement of mandatory drug and alcohol testing, and installed anti-lock brakes in our trucks. All have played a key role in improving highway safety.

And now we see advanced wireless communication as a new, vital element in building upon our great safety record. That's why we're very concerned about the need for more antennae towers for wireless networks. It is forecast that very soon half the calls emergency operators and dispatchers receive will come from wireless phones.

Wireless communications are a critical link to public safety, as spoken before. The trucking industry is launching a national safety initiative called "highway watch." It builds upon programs adopted by some of our State trucking associations. In this program, we will be training our truck drivers, our knights of the road so to speak, to use their onboard communication technology to report to police and highway authorities all manners of unsafe activities and conditions on our Nation's roadways.

When our drivers see something like: vehicle accidents and breakdowns, reckless driving, drunk driving, highway rage, road rage, criminality, and dangerous road and weather conditions; they can quickly utilize their wireless communications to notify the proper authorities and greatly reduce the reaction time to hazardous traffic events.

Let's face it, the highways have become a not-so-friendly place here lately, but because we in the trucking industry consider the highway to be our neighborhoods, we are as good residents going to help clean them up. We are going to be the neighborhood watch on our Nation's highways.

We are going to form partnerships with the ALA, the State Police, the emergency medical community, and others involved in traffic safety, in using our onboard communications technologies to report unsafe criminal acts to authorities. When a would-be lawbreaker sees a truck on the highway, we want him to see a knight on the highway in his neighborhood, but our drivers can't do this if there are dead zones or other holes in the communications network.

If our safety initiatives are to be successful, we're going to need a network that connects every time, and such an end-to-ten system only works if enough antennas are sited. The trucking industry of today and tomorrow is relying heavily on wireless technology, and we need a seamless wireless system that will enable us to accomplish our mission.

But there is a caveat. While trucking encourages the use of technology and its productive applications, we need to be careful that the government doesn't attempt to misuse important communication technology as an enforcement tool. Doing so will only deter forward thinking motor carriers from using technology that can benefit all of us.

If the government should choose to play gotcha with companies that voluntarily install onboard technologies by requiring them to

turn over extensive data that other companies don't have, then we're going to see more and more carriers refuse to install state-of-the-art telecommunications equipment, and that won't benefit anyone.

Telecommunications equipment should be used for telecommunications purposes, not for government enforcement purposes.

Let me conclude by saying that there is no better group than the motor carriers, the knights on the road, to improve the safety of our Nation's highways. I strongly urge that everything be done to help us in this regard. In a significant way, this involves wireless technology, technology that we can use for the good of everyone, not something the government should use against us.

Mr. Chairman, that concludes my remarks, and we look forward to working with this committee. Thank you very much.

[The prepared statement of Edward R. Trout follows:]

PREPARED STATEMENT OF EDWARD R. TROUT, CHAIRMAN, AMERICAN TRUCKING ASSOCIATION, INC.

Thank you, Mr. Chairman, and members of the committee.

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Our industry's commitment to highway safety is unparalleled. The initiatives we've undertaken in recent years, such as:

- creation of the commercial driver's license
- banning of radar detectors in commercial trucks
- 1,000 percent increase in roadside inspections
- stepped-up enforcement of mandatory drug and alcohol testing
- and installing anti-lock brakes in new heavy trucks

All have played a key role in improving highway safety. And now we see advanced wireless communications as a new vital element in building upon our great safety record.

That's why we're very concerned about the need for more antennae towers for wireless networks. It is forecast that very soon half the calls emergency operators and dispatchers receive will come from wireless phones. Wireless communications are a critical link to public safety.

The trucking industry is launching a national safety initiative called "highway watch." It builds upon programs adapted by some of our state trucking associations.

In this program, we will be training our truck drivers—our "knights of the road"—to use their onboard communications technology to report to police and highway authorities all manner of unsafe activities and conditions on our nation's roadways—when our drivers see something like—vehicle accidents and breakdowns, reckless driving, drunk driving, road rage, criminality, and dangerous road and weather conditions—they can quickly utilize their wireless communications to notify the proper authorities and greatly reduce reaction times to hazardous traffic events.

Let's face it, the highways have become a not-so-friendly place, but because we in trucking consider the highways to be our "neighborhood," we are—as good residents—going to help clean them up. We're going to be the neighborhood watch on our nation's roadways. We're looking to form partnerships with: AAA, the state police, the emergency medical community, and others involved in traffic safety, in using onboard communications technologies to report unsafe criminal acts to authorities.

When a would-be lawbreaker sees a truck on the highway, we want him to see a knight of the road on patrol in his neighborhood. But our drivers can't do this if there are "dead zones" or other holes in the communications network. If our safety initiatives are to be successful, we're going to need a network that connects every time, and such an end to end system only works if enough antennaes are sited.

The trucking industry of today and tomorrow is relying heavily on wireless technology, and we need a seamless wireless system that will enable us to accomplish our safety mission.

But there is a caveat I'd like to mention. While trucking encourages the use of technology and its productive applications, we need to be careful that the govern-

ment doesn't attempt to misuse important communications technology as an enforcement tool.

Doing so will deter forward thinking motor carriers from using technology that could benefit all of us. If the government should choose to play gotcha with companies that voluntarily install onboard technologies by requiring them to turn over extensive data other companies don't have to, then we're going to see more and more carriers refuse to install state of the art telecommunications equipment.

This won't benefit anyone. Telecommunications equipment should be used for telecommunications purposes—not for government enforcement purposes.

Let me conclude by saying that there is no better group than motor carriers—the knights of the road—to improve the safety of our nation's highways.

I strongly urge that everything be done to help us in this regard. In a significant way, this involves wireless technology, technology that we can use for the good of everyone, not something the government should use against us.

Thank you very much.

Mr. TAUZIN. Thank you very much, sir. Let me first recognize myself for a quick round of questions before I turn it over to the members. Mr. Heinrichs, I noticed two extraordinary ironies that you demonstrated for us.

The first was mentioned earlier, that the wireless services very often are purchased for security reasons, and yet in wireless 9-1-1 is not nearly as secure as wired 9-1-1, and that's a terrible irony that perhaps is not well understood even by the purchasers of wireless communications systems, and one you obviously say need to be addressed.

The second one caught my attention perhaps in a new way. I had not thought about this before. As more and more Americans buy cellular telephones and use them to report accidents on the highway systems like the one the Mayor spoke about in his community in Omaha—if more and more of those people are reporting accidents cannot say where they are, and the dispatcher cannot determine where they are, then confusion reigns in emergency services area.

And I suppose if I were the one receiving the calls, I'd be thinking there were 25 other accidents out there perhaps, and I'd have to eliminate those possibilities in order to make sure I had the sufficient dispatch equipment to reach all those various people who might be injured.

Maybe I can turn to Mayor Daub. Have you seen this in your own city? Is this becoming a problem, as more and more people are reporting accidents without being able to say where they are?

Mr. DAUB. Well it's no only, Mr. Chairman, the reporting of the accident, but it's the distraught call that hangs up and the disconnect occurs. I mean it's even worse than that. It's that they not only don't know where they are, but they may be under pressure in their own homes—someone with a heart attack, someone to be threatened by a criminal act or on the highway somewhere——

Mr. TAUZIN. I think we know that problem.

Mr. DAUB. [continuing] and they disconnect.

Mr. TAUZIN. Yes, I know that we know that problem, "I am in trouble. Come help me," and they hang up, and we never—we've got a search and rescue problem on our hands.

What I am talking about is the case where you've got so many people calling in, saying, "We just saw an accident on the highway." "Where are you" "I don't know." And then the services has to—is there one accident or five out there? How do we know?

Mr. DAUB. Well, you have to answer each phone call as if it were a heart attack. I mean you cannot take the chance that there may some other reason for that call. So you have to have a massive amount of hands-on activity that——

Mr. TAUZIN. So is the problem as I see it, if we don't somehow implement a system that automatically identifies location, that takes the search out of search and rescue, as you so very adamantly pointed out, Mr. Daub; if we don't have that, the problem is exacerbated by the more reports you get on the same accident.

And as more and more people use cellular phones for that purpose, as I should hope the Truckers Association would not be as guilty of this as truckers I think generally know where they are on the highway, but we are going to get more and more people reporting accidents with less and less clarity of where the accident is, and we complicate an already very complicated situation.

Mr. DAUB. As Mr. Heinrichs said, "9-1-1 technology enhanced technology is both the blessing and the curse," because on the technology side those of us handling it are overwhelmed at points in time, but the other side of it is that we are glad to have that call.

Mr. TAUZIN. Anybody else want to jump in there? Mr. Miller.

Mr. MILLER. Mr. Chairman, at one of our State Police facilities in North Jersey Taunton we have 50,000 9-1-1 calls a month.

Mr. TAUZIN. Wow.

Mr. MILLER. We don't have a clue where they are, and this is really worse than basic 9-1-1 because with basic 9-1-1, without even the address, we can lock up the trunks, we can trace, we can find them. We can do something.

We don't have a clue. All we know is somebody made a 9-1-1 call, and the phone's ringing. So we don't know where they are. We have to send multiple units. It ties up the dispatchers. Then those people that are calling on wireline, it starts to hurt them because our whole level of service goes down, and we have to buy a lot more equipment, hire a lot more people.

So the cost not to do this is probably much greater than the cost to it.

Mr. TAUZIN. Dr. Hargarten, you look like you are anxious to jump in.

Mr. HARGARTEN. There's a segment of the population that we need to think about in addressing this, and that's the traveling—the vacation couple. The vacationer who is going from one place to another witnesses a crash. They'll probably not know where exactly the location is to provide that key information to EMS and for 9-1-1.

They also need that constant 9-1-1 all across the country.

Mr. TAUZIN. Pat Danner brought up an issue. Let me just lay it out and get somebody to respond to it? Why do we have so many different emergency numbers in America? We've got an interstate system that's pretty ubiquitous now, except in Lousisiana—we still don't have a north-south interstate.

Where is Pat? Where is ISTEA? But the bottom line is: Now that we have an interstate system we are much more traveling, we are a much mobile population, why do we have so many different numbers? Perhaps somebody can hit that for me. Why don't we have a single number nationwide that can reach help in any State? Why

do we insist on localism here when localism would assume that only local people are driving around on your highways, and that's no longer true? Anyone?

Mr. TROUT. I don't know the answer to that, but in talking to my drivers and telling them what we are trying to do and ask them how they could respond to that and how they could help, the one thing they said was, because they're trying to do that right now, they said, "If we could just get one number across the country because we're in Missouri it's one number, and it's very frustrating."

And they too could probably do a lot better if we had that one number.

Mr. TAUZIN. There's one State here that said there were two numbers in one State. Why does that happen? Can anyone answer that?

Mr. HEINRICHS. Mr. Chairman, I can attempt to answer that. In the early days in wireless, I mean first of all I think the point made by the Mayor here is right on, and that is that the use of wireless in public safety has been a godsend. There's been a tremendous number of lives saved. So we should be careful not to paint the whole thing with this problem.

I think what happened in the early days and what we're experiencing now are the results, is that there was not a capacity to locate callers or to cause call routing to occur. The majority of people with portable phones were in—on highways—and the highways were the purview of the State Police or State Patrol. So they needed a methodology to get those calls to the State Patrol or State Police in many States.

That's why the number was adopted, and that's in large part how the calls ended up there. Since then those systems have begun to change all across the Nation, but it's certainly not uniform yet.

Mr. TAUZIN. The Chair is pleased to recognize of the members the gentleman from Ohio for a round of questions.

Mr. SAWYER. Thank you, Mr. Chairman. The description of locational technology is fascinating. I appreciated Mr. Miller's taking the time to offer it. Triangulation is an old technique, but I assume that in its applications here that it has to be computer-managed because the times are so short and the location computations are complex.

Are there limits to what current technology can handle in terms of volume of calls or is that simply dependent on the size of the system? I am thinking in terms of what happens if a tornado sweeps through a community and you're not getting just 1 or 2 random calls in terms of accidents, but an entire community may well be triggered automatically. Or even worse, a hurricane where huge areas or perhaps even worse, the kind of things that happen with earthquakes in southern California, where virtually an entire community would be set off.

Mr. DAUB. Mr. Sawyer, the problem there is one of the lack of availability of channels of spectrum, if you will, and it's been a big issue in front of the Congress and the FCC to allocate more of the frequencies, more of the channels of spectrum for public safety purposes.

While moving from analog to digital does help us get more defined spectrum, and if you will, split the channels and have less

bleed or drift for more communications channels, you now have the emergency medical people with this wonderful new technology they've got. And a cruiser car or a rescue squad now needs two channels: one for its voice and another for its ability to send vital life signs ahead to the emergency room, preparing the way for that person once found and transported to have a better chance of their life being saved.

So that's why I said in my testimony, it's tower sitings. It's more available spectrum and then the technology which is available that really is not going to get deployed as quickly as I think the FCC or the Congress wants, because of this discussion going on about cost recovery.

Now I want to make this point. This idea is not a new issue or a monster that's suddenly sprung up on the telephone industry or on government; 9-1-1 has been funded by a multiplicity of ways, including line items on telephone bills, charges placed on information for calls on set numbers, general government funds to name a few; and what we are finding out is that items which government had paid for included dedicated 9-1-1 trucks, selective users, ALI data bases, and other items. We didn't pay for those things in the past. Now the argument is——

Mr. SAWYER. I am prepared to ask you this question if you want me to?

Mr. DAUB. Well but why, why not tie them together and understand that all the problems you've heard on this panel, Mr. Congressman, aren't going to be solved if you can't get the technology deployed into the marketplace.

Mr. SAWYER. I understand. My question is: Is the technology sufficiently developed that it can't be overwhelmed by——

Mr. DAUB. It's ample.

Mr. MILLER. Relative, Congressman Sawyer, to the location there is no limit. Where the limit is, is there can only be so many calls at a given time because there's only so many operators and trunks and so forth; but as far as location, no. We measure radio waves, incidentally 1 foot is a nanosecond, so it's just like dropping a stone in the water. You see the ripples that go across, and we just time it.

So no, there isn't limitation. We handled multiple calls. We actually put through 83,000 test calls when we actually had our test. So there is no limitation for the amount of people.

Mr. SAWYER. Let me get back to the Mayor's point. In terms of redistribution of dollars from power-leasing revenue—that is in fact a vehicle for redistributing dollars—it seems to me we've probably run into the same kinds of difficulties that we have with the highway system, where there are disproportionate investments that are needed that is a product of thinly populated areas that none the less need huge amounts of coverage.

How do you propose to distribute the funding required to recover the costs for building the infrastructure?

Mr. MILLER. For location, Congressman?

Mr. SAWYER. Yes.

Mr. MILLER. Well, the type of technology we used was time distance of arrival. There are other technologies. There's angle of ar-

rival, people looking at GPS. They're looking at a whole bunch of ways, and I would suggest that one size probably won't fit all.

We really don't want to get into the location business, us and public safety. We want the carriers to build it, and we'll work with them in order to meet the Federal standards, and then we'll tie into that system; but it's just—I mean you're right on the money as far as you get in areas that aren't as populated. They don't have as many cell sites, but the cell site is usually higher and they have bigger footprints. And as you come down into a more populated area, there's more cell sites and they are smaller. So the math works.

Mr. SAWYER. Clearly in Omaha there is one problem, but as soon as you get into Montana it's a substantially different problem.

Mr. DAUB. Congressman, wireless carriers should look at this opportunity to provide services generally as a revenue source, and if they look at it as a revenue source then public sector wasn't expected in the wired line phone system to pay for all the other infrastructure for which they made money. So in this case we think recovery of cost is important but only those associated with E9-1-1, and that's the hang-up we're having.

Then that will take care of the smaller communities, the dead space, and we agree that without preemption States should do this. Ten States have enacted laws. Fourteen are looking at laws now to create a recovery mechanism for these towers and for the distribution of funds to get E9-1-1, but there's a slow-down from the industry side because they want a total recovery system. We believe it should be less than that, that only related to 9-1-1.

Mr. SAWYER. Thank you. Mr. Chairman, I mean it's your time.

Ms. HOYT. Just two points. We talked about the 9-1-1 universal number, and the ComCARE Alliance's feelings that Congress should make 9-1-1 the national number and that our feeling at this point is that would reflect the area in which you are traveling.

We want to institute this change to be a condition for States to receive any funds to upgrade their system, and in upgrading the 9-1-1 networks this is what we thought was really the centerpiece of our program or our layout and why improving that 9-1-1 infrastructure, we're hoping to support programs to distribute resources to the States so that they could buy the hardware, the software, the equipment and that type of thing.

We don't think that the Federal Government can or should pay for that entire upgrade process, and the formula we've kind of worked out was half to States based on population, a quarter based on the high cost needed, and the other quarter for Federal. So, that's where we are as an alliance today with that regard.

Mr. SAWYER. Is it your view that a geo-positioning system could be a useful bridge in overcoming the lack of universal tower coverage?

Mr. DAUB. And we have not only satellite imaging now, Congressman, and the ability to look for sewer lines and wires just about anywhere in the country and pipes. So you can use that technology. It's deployed. And the surcharge on the wireless phone for example can be a real financial solution, a user fee, if you will.

And there's a user fee now in most States on the wired phone. So a user fee on the cell phone may be part of the solution. I think that should be locally determined because the costs are different.

Mr. SAWYER. Thank you, Mr. Chairman.

Mr. TAUZIN. Thank you very much, Mr. Sawyer. The gentleman is recognized for a round of questions. Let me then follow up. You mentioned again, Mr. Daub, the question of the FCC allocating sufficient public safety spectrum. The Balanced Budget Act of 1997 mandated the FCC to allocate to public safety 24 megahertz of spectrum within the channel 60 to 69.

Do you know whether or not that's working well?

Mr. DAUB. We were very pleased to get the 24 channels, but that's—if you look at the PSWAC Study, that's just the beginning step and the substantial additional allocation that's envisioned by the FCC and the Congressional action needs to be kept on track.

At this point in time it gets us started, but it's insufficient for this explosion of cellular technology that we've been talking about today.

Mr. TAUZIN. I mentioned to my friend in Ohio, that the reason Nathan Deal is not with us today is precisely the scenario you envisioned. You know, his district in Georgia was tremendously damaged by a large tornado that killed 13 of his constituents, and he is traveling literally in his district right now, as people are rallying around those families. So you can imagine the crush of calls that must have happened in that kind of an emergency or that happens when a hurricane hits or a similar earthquake disaster, as we're having around the country.

Mr. DAUB. Mr. Chairman, you know, in Oklahoma when the Murrah Federal Building disaster occurred, the cell system just froze up.

Mr. TAUZIN. It just froze up. In that regard, Mayor, we were told there are as many as 600 moratoria around the country right now. As you know the law permitted the local governments, you know, on the preemption standards we've allowed the local governments the right to declare a moratoria for tower siting; and 600 communities have chosen that option rather than to work out some sort of zoning or other model codes for tower sighting.

Is there a hope that that can change soon, that those communities will recognize the importance of tower siting to the needs of such a wireless like this for the safety zone citizens?

Mr. DAUB. I hope that every community in the country gets away from this moratorium thing just as quickly as possible. The need for public safety spectrum should be sufficient inducement.

If Congress keeps the pressure on in allocating spectrum, then I believe that you'll see cities get back into the tower siting business, but the tower siting problem is different in that it's the local neighborhood zoning issue of towers springing up and the ugliness, the unsightliness of it, the potential damage to value and neighborhoods.

And I think that's what local governments are struggling with now is to figure out how to get through the local argument with the neighbors on getting those towers erected.

Mr. TAUZIN. You understand the frustrations with the health care community and the safety community in regard to that. I

mean Congress again certainly doesn't want to interfere with those local zoning decisions.

At the same time, if we're going to have a national system moving to a national number makes sense. Moving to a deployed technology with the assistance of whatever financing arrangements we can work out that assist the States and localities in deploying the technology is certainly another ingredient so that the search is taken out of search and rescue in many of these calls.

But getting the technology deployed in adequate tower locations is an equally daunting task that somehow has to be overcome and moratoria just stand in the way of that. It's a sort of stick your hand in the sand and saying that it's not an issue, and yet it is an issue.

I guess what I am saying is Congress is very loathe to get involved with local zoning decisions, and I don't pretend to suggest that we want to do that here, but at the same time how can we encourage the municipalities, the communities of America to break away from the moratorium defense and to instead to engage in a rational, logical discussion of how best to allow siting to occur in ways that are not contrary to aesthetics and to the concerns of local communities about land values and such?

Mr. DAUB. I first want to agree with the new chairman of the FCC and with your statement about avoiding preemption of local zoning, and the National League of Cities and NACO are firmly on record opposing preemption.

Having said that I'll go back to my previous answer to give some brevity to my thought here: Because we don't have enough spectrum allocated to meet all these needs, and these are public safety needs we are talking about today, most large cities will be precluded from doing much of this work because there isn't enough spectrum.

And second, the FCC rule requires cities to purchase the new equipment as a precondition for applying for the new spectrum. So as a result of that, cities are worried about how many towers they put up in their city. If they had more spectrum, there would be a little bit of a relaxing of this argument and they would be able to get back into the tower business.

Mr. TAUZIN. Well, the——

Mr. DAUB. You can hang a lot on one tower. That's the cooperation that you need to get——

Mr. TAUZIN. I understand that. The point though, however, is that there are private businesses that want to deploy communications services that would literally provide 9-1-1 access for those who want to use a wireless system.

I mean let's take these dead zones we are talking about, like the park here in Washington, DC. I mean obviously it is not healthy to have a park operation where very vulnerable people are using that park and who might want to have the security of the cell phone where they might be able to dial 9-1-1 in the case of emergency, but because no one has agreed as to where a tower can go up to cure that dead zone, that service is not provided to those citizens.

And we are not talking about public safety spectrums here. We are talking about the private use of that spectrum so private citi-

zens can dial a 9-1-1 number and get access to emergency care. So I understand your arguments about getting the spectrum and getting assistance and the technology, but I am trying to make a point that if we are going to have a national system where no one in this country is ever denied the right to access immediately emergency care in an enhanced system where location can be easily derived, where medical attention or police attention can be paid that citizen immediately, isn't it the duty of the cities to overcome this challenge of tower siting and drop these moratoria rapidly as possible?

Mr. DAUB. Agreed. And we think it's the industry's job as well to sit down at the table and cooperate on these matters.

Mr. MARTINEZ. Mr. Tauzin?

Mr. TAUZIN. Yes, please, Dr. Martinez.

Mr. MARTINEZ. We spoke a little bit about car crashes as being the major concern. Let me just point out that with automatic location and the E9-1-1 system for wireless, really car crashes are actually a small minority of the number of emergencies that occur in a community. There are a lot of issues in which time is critical, such as strokes, heart attacks, poisoning and infectious disease.

My experience has been while bringing together many of those who utilize the system on a day-to-day basis that this is often viewed as a tower issue or an issue for the companies, as opposed to a community issue.

My experience has been that most people think when they have a cellular phone, that if they dial 9-1-1, help is going to be there. I think this hearing publicizes that that is not the case. It begins to change the dialog and the perspective in which discussions occur.

Mr. TAUZIN. I want to yield to my friend Mr. Shimkus. I want to make one final point. It's not just the cellular call either. It's the paging capabilities, the other wireless service. I've got an aging mother who lives alone in Chack Bay, Louisiana, and, you know, we couldn't get mom to leave that house and move into a community home, you know, with as many trucks as you could deploy to Chack Bay. She would not move.

She wants to be in her home, and I am worried about her every day, you know. She's a twice cancer survivor, and she's obviously at risk all the time of some injuries. She's fallen and recently broke some ribs, and, you know, she's just had an operation a couple of weeks ago. I am constantly worried about her, and I constantly call my sisters to check in on her and my neighbors and my aunts and uncles, and they drop by and check in on her, and friends with the church.

But you know there are new systems now available, but in the context of some changes occurring in the wireless system in Chack Bay I learned a couple of weeks ago that the cell site might have to be turned off for a few weeks because they're changing carriers or something, and I thinking, "Suppose that's the time when mom needs that wireless service, and that trauma care doesn't arrive for her, and we lose her because of some silly technology glitch like that." And there are parents like that all over.

My friend from Ohio, Mr. Sawyer.

Mr. SAWYER. Mr. Chairman, in another subcommittee of this committee I relayed a story last week that fits precisely with that.

My mother is homebound and sleeps in a reclining chair. Her oxygen is generated by an electrical oxygen generator and the electricity went out in her neighborhood. She called me, and she said, "What should I do?" I said, "Call 9-1-1."

Why I didn't do it, I don't know. She could not even get herself up out of her chair because it was dependent on electricity. She called 9-1-1, and they said, "We don't do electricity. You'll have to call the electric company."

She fortunately had enough presence of mind to explain what the difficulty was, and they were there immediately, but the ability simply to have touched the button and to have folks know where she was and that there was a problem——was comforting.

Mr. TAUZIN. And there are systems like that today, but they're not available to seniors or homebound patients perhaps because of the moratoria. That's the only point, Mayor. I don't want to beat up on the cities. I certainly don't want to suggest that we get involved again in those zoning decisions.

I am simply saying that we as a country are perhaps denying life-saving capabilities to citizens, not just on the road, but in their homes, and in their offices, and in the parks of America—wherever that we may be—in a duck blind somewhere in south Louisiana—when someone has a stoke or a heart attack or something, or gets shot by accident.

It seems to me that we all have to think through this, and I guess—you talked about using the bully pulpit, and you've been on my side of this equation before—you know, we do it on occasion and need to do it, without necessarily passing a law or trying to regulate.

I guess I am trying to use it here and trying to encourage the cities to see their way through to ending this moratoria business and to get down to a lively, authentic, realistic and responsible discussion about how we can get deployment of these technologies.

One final point then I will yield to Mr. Shimkus. You know, we just passed laws moving the whole television industry to digital. If we can't site digital towers, the time table we've set with the FCC is not going to occur, and all these new digital services you are talking about, Mayor, are not going to be timely deployed in America without again tower siting.

So it's an issue we just can't keep ducking. We somehow have to address it, and what I suppose I am saying, Mr. Mayor, is there are ways in which we in Washington, with whatever resources we have, with whatever policy we can help make, would assist the communities in resolving these issues without necessarily getting into your business or in any way trying to attempt to have even Washington to make land use decisions. I am saying we are prepared. We just need to hear from you and be a part of whatever effort you can help make to end the moratoria and move this process along.

Mr. DAUB. Well, I made that request in my opening statement. The city of Omaha, we notified the wireless providers in our city in March 1997 that we wanted the service, and we asked them for cost information to determine the cost recovery mechanism. The answer we received from all of our carriers was emphatically stated.

First, we had to have the cost recovery mechanism before they would provide the information. That's where we are today.

Mr. TAUZIN. Well we've got to move. We can't stand there. We have to somehow work this out. I am going to yield to Mr. Shimkus for a round of questions.

Mr. SHIMKUS. Thank you, Mr. Chairman, and Mr. Mayor, it's good to have you here. I think we've got a lot of spectrum that we're willing to sell off. There's spectrum available that we've talked about—and hopefully, we'll address that issue. But the spectrum issue is one that with the compression of digital technology, there's plenty available out there I think for everyone to use, and we are asking people to buy, but I don't know if we can give it away right now.

I drove by a late night store during the campaign trail on I 55 South and just glanced out the window, and I saw steam coming up. A darkened highway, rural America. So I pulled over, after I drove past it so fast.

The bottom line is a guy had hit a guardrail, and I had my digital phone that was running short on batteries. I made 2 or 3 calls because it kept cutting out. The guy was fine. It was one of those wrecks, where you go there, and you're expecting the worst, and he was driving a pretty old car that was pretty solidly built so I don't think anyone disputes the urgency and the need of this.

We bring up a lot of points that I'd like to ask some questions about. I apologize for being in and out. It's been a very busy day, and one of the most frustrating things I have about this job is trying to meet with everyone while you're still trying to listen to our panelists, which is not always possible.

Illinois funds their 9-1-1 system through a line charge on telephone lines. So it probably was addressed, but I'll just reiterate. One of the problems is when you have ten time more calls—ten times as many calls on a 9-1-1 because of cellular use. I think we are finding the problems of not being able to fund the additional operators, the additional response ability because there is no charge right now. It's a deregulated system.

Now I like deregulation. That's a good thing, and I think that's why we have this great technology advancement, but that's another problem that we're seeing in Illinois, and they're addressing the charge and how to recover the costs of the increased burden of work because of the cellular technology.

The struggle is the old common phenomenon of NIMBY, of not in my backyard, on the placement of cellular towers. I think there's some—I think we have a credible debate about if and when we can get Federal land or State land and help parcel that to help bring full coverage, and I think we can be players in that.

I am also concerned about the local municipality's zoning rights and abilities and authority, not attempting to tread on those, but I agree with the chairman. I think there's ways in which we can move forward.

Something was mentioned, and I don't know who to ask this to, and I think my colleague from Massachusetts mentioned, the 24-hour tracking, actual tracking. If I have cell phone and I am driving, in essence it is this like a Star Trek communication badge. You press it or once you have the phone on that really people know

where you are at all times? I throw that out to the panel because I am not sure who addressed that earlier.

Mr. HEINRICHS. Yes, sir. The technology that's been demonstrated so far actually does its location fix at the moment someone presses send and transmits the digits 9-1-1. That's the trigger for location tracking to occur. It is technically possible to track phones that are powered on, but that hasn't been demonstrated anywhere, and I do believe that it was Congressman Markey's concern about the privacy of that data.

But under the current 9-1-1 infrastructure demonstrations, it's not been a real-time tracking. There's no continuous trail. It's only a point identification at the moment, a call to that specific number was initiated.

Mr. SHIMKUS. I would be in support of that. I would also agree with my colleague from Massachusetts. It would be a concern of me if we have a national tracking system for citizens. There are quite a few of us who are now using the system.

Mr. TAUZIN. Would the gentlemen—the representative from the American Trucking Association also pointed out, I think correctly, that we have to be very careful in terms of how this equipment is used because we'll discourage people from deploying it in their vehicles if in fact it's used by law enforcement for the wrong reasons, the gotcha mentality you described.

I noticed, Mr. Martinez, you were shaking your head. I think you agree with that proposition.

Mr. MARTINEZ. Well I can't speak for the administration, but the issue has been raised before. We certainly would be concerned about decreasing deployment of the technology.

Mr. SHIMKUS. The other question I'd like to have a response on is if there was an emergency that the system might be able to notify people in a particular area. How would that occur? Can someone explain it to me? Is it placing a call to everybody that's in that geographical region?

Mr. HEINRICHS. Yes, sir. The technology that I was describing, it's possible today on the wireline side because we know the physical location. The issue is you can't ring all phones because there isn't a capacity so you have to geographically select the phones you'll notify.

It's necessary on the wireless side to address the issues raised by this panel about location determination before that could be included in outbound calling, but there are a number of municipalities now who have programs for outbound calling for emergency notification.

They are used for situations like hazardous materials spills, flash floods, dangerous suspect free in the neighborhood with a gun, those sort of things; and I think that it's another method to use some of the infrastructure that's developed for emergencies and reverse its application and use it to serve the citizens.

I think wireless is so important because a lot of depend or they're coming to depend on wireless phones that we want to include that in that technology as well.

Mr. SHIMKUS. But that would only occur if the full time tracking by the power being on?

Mr. HEINRICHS. Well I think it's conceivable. It hasn't been deployed in wireless anywhere that I am aware of, but it's conceivable that the wireless system could pull phones at the point of an emergency as opposed to tracking them continuously.

Mr. DAUB. Part of the FCC requirement says, "Ten digit return call to the wireless point of initiated call." You can call back the wired phone now, find out what happened, why did you hang up. You need that same 10 digit callback capability. And if that's established, the technology is there, then you'll have that capability.

Mr. SHIMKUS. Okay. And finally, for Dr. Martinez, has NHTSA done surveys on the accidents that maybe occur because of cellular use by people in vehicles?

Mr. MARTINEZ. We just published a paper, at the beginning of the year, that looked at wireless technology in cars. One of the problems we do have is the fact that most of the contributing factors were not collected at the State level when they did police reports.

However, we did point out that with wireless technology there are three types of distraction. One is conversation, which is very different than listening to music, because you're actually involved. Then there's visual distraction, and finally there is physical distraction where you are using your fingers or touching.

Interestingly enough, we don't show much difference between handheld or hands free technology in the vehicles themselves. We do find the size of the buttons makes a big difference, but in overall crashes it didn't make a difference.

I want to point out that although we are concerned about the issue of being on the phone, the bigger issue is distraction, and we can't quantify that as well. For example, dashboard dining is a very big issue in this country. Some of the finest minds have designed tacos we can eat while we drive, right, but we don't know how much that takes away from concentration.

We also point out that radios distract people, CD players distract people, and other issues. We are concerned about a lot of the navigation systems that are now coming into the marketplace. We are moving forward with research to help direct ways to minimize distraction.

Mr. SHIMKUS. There is no move by the NHTSA to ban or address cellular use for a safety aspect?

Mr. MARTINEZ. No. We find that most States have laws about inattentive driving that are rarely enforced, if ever. It would make the news if someone was actually arrested for inattention or pulled over. We think that the States have to put a greater focus on this issue.

I will say the cellular industry is beginning to do more education about using the phones properly when driving. What we are doing is trying to put together groups to talk about ways to minimize distraction, as a lot of this technology comes into cars. We already have commitments from those in the industry.

Mr. SHIMKUS. And the last thing is, if we moved—in your analysis I am sure you would also consider the benefits of safety that occurs because of this very same argument. Now had I not had a cell phone and the person that I responded for was critically injured—I think in some of the charts that was addressed earlier he

would have been a case—obviously we've had a lot of testimony today about how the cellular industry has really helped preserve and save lives.

I thank you. I learned a lot today, and I yield back to the chairman.

Mr. TAUZIN. Thank you, Mr. Shimkus. I just want to point out to you that one of my dearest best friends in this world a couple of years was riding on Highway 90 in Louisiana in my district, and apparently a truck without lights had pulled out in front of him, and he did not see it.

It was loaded with some oil field equipment, and he ran into it. The truck was so big that apparently the truck driver never noticed. He just kept on going, but in the accident he was—his car was run off the road. If you know my district, you know that there isn't a lot of off the road.

He's out in the marsh and off the road there somewhere. He had over 100 bones broken in his body. Both of his legs were crushed, and he had multiple injuries to his chest, et cetera. He stayed there all night, bleeding and in incredible pain. You can imagine.

A garbage collector the next morning happened to spot what he thought was a taillight out there, and a good samaritan like you, John, he got out of his truck and investigated and saved my friend's life. He's alive. He's been going through all kinds of reconstructions.

I can imagine had he been driving a car say that had automatic—all these computers we have in our cars—had that car been able to speak and to inform someone that he was on the side of that road in that condition, what pain and suffering he might have avoided and how much perhaps even healthier he would be today because he's still obviously inhibited by the many operations he went through.

I guess the question I want to close on for you in this panel, and perhaps, Dr. Martinez, I need to go to you quickly. If I were a mayor I'd be a little concerned Tauzin is going to try to regulate zoning. I am not going to try to do that, Mayor. Know that. I am going to try to use the bully pulpit to encourage the end of moratoriums and good common sense, you know, model zoning laws for deployment of wireless technologies because I think that's in the Nation's interest and the citizens' interest, not just here but in so many ways. And I'll continue to do that, but in a way I think that's respectful of local authorities.

And likewise, if I were in the automobile industry, I'd be aware that Tauzin is going to try to somehow pass a bill that's going to force automobiles to regulate them into having all kind of new technology and being able to speak to a wireless ubiquitous 9-1-1 system.

And I also want to start at the top, but I don't intend to do that. I have no notion of that, and I don't believe that's necessary. I see Sue shaking her head. There's no need I don't believe for us in Washington and a legislative or regulatory end to be doing that. This is the sort of thing that will evolve naturally if we make policy that encourages it and facilitates, I think.

Am I right in that regard? Please feedback to me on that point. Sue, first of all.

Ms. HOYT. Yes. I know we are winding down here in terms of conclusion, but I think that to sort of refocus the discussion. I am here because of public safety issues, and I think that's why we have all gotten together to create this end-to-end system, and we are hoping to link these technologies to provide that, and I think as the Chairperson of ComCARE we do, and the other members, we're here to help our constituents, your constituents to enact the kind of Federal legislation that we do need to achieve those goals, and we are not here to tell, as you've mentioned, the business stuff—the car dealer and things like that.

Mr. TAUZIN. Dr. Martinez, would you kind of feedback to me on that notion?

Mr. MARTINEZ. We have a good model from how EMS was first developed in this country. We challenged the way things were. We talked about what it could be. The technology was there. It was a matter of bringing the groups together and solidifying it. Congress created programs that helped to bring people together on a State-to-State level. The stakeholders then went out and created, planned, and developed a system that we now count on each and every day.

If you look at our history, we've done it once. I think, going back to a point you made earlier, that people are astounded to find that the growth of wireless system has created a need, a need for what they think they have already. Most people see it as a human issue, a people issue, and are ready to stand together to resolve the issue.

Mr. TAUZIN. Well I want to close with this final thought, and that is that at the graduation ceremony at Nichols State University—we call it "Harvard on the Bayou"—I wish my friend from Massachusetts was still here to appreciate that fact—but in my hometown university in Tahbudaux we brought in a Cadillac with the ONSTAR and park it in the auditorium there, and then the presentation to the students there, as I was giving them a peek into the future, we contacted the headquarters, and they contacted the satellite and in the darkened auditorium they blinked the lights and tooted the horns, that we could find in the car.

And I walked over to it with a wireless mike and found it be locked, and again, on a wireless phone, called the headquarters again, somewhere in the Midwest, and they contacted the satellite again. And the satellite unlocked the car and let me in.

And we had a real-time demonstration of the technology, Sue, that's here—the present GPS with wireless services, if only we could connect those dots. And if connecting the dots means that we take the search out of search and rescue, sir—which is a great phrase—and if connecting the dots means we also take—rescue the dead out of the dead zones, and in fact provide us more live tissue with the time we have to save it, Doctor, I think this hearing will perhaps advance that goal and get us on the way.

I see my friend from Massachusetts has arrived, and I would like to ask him if he has any last comments for this panel.

Mr. MARKEY. I apologize, Mr. Chairman.

Mr. TAUZIN. The Chair recognizes the gentleman from Massachusetts.

Mr. MARKEY. I thank you very much. The Telecommunications Act of 1996 has a provision that requires the President to prescribe

procedures by which Federal departments and agencies make government property available for the placement of cell towers. Do you think that this provision needs to be strengthened in any way?

Mr. DAUB. I am aware of that particular provision, Mr. Markey. I think it's a good one, and what it has encouraged many of my colleagues across the country to do is to take a good look at their private property and public property physical assets and develop inventories of tower sites and offer them to the cellular tower community and have differing timeframes by which those tower sites can be put on that various property so I think it's a good policy.

Mr. MARKEY. But you don't think we need new legislation? We need better enforcement of existing policy?

Mr. DAUB. I think if the Federal property managers understand the policy they're going to be out there making those sites available.

Mr. MARKEY. And what should we do with any fees collected by government agencies for the lease of cell towers on Federal lands? Does anyone have any suggestions?

Mr. DAUB. I probably ought not to say anything about that.

Mr. MARKEY. It also included a version governing local zoning for the siting of cell towers. Do you feel that that balance is working, Mr. Mayor?

Mr. DAUB. Yes, I do. There are some places where I think that some local communities have very serious neighborhood objections that have caused some heartburn as we adjust to the new deregulated environment, and I think there are some local jurisdictions that are having trouble with their private industry and their State legislatures and so they are a little bit concerned about cost recovery, but I think it's headed in the right direction. Yes, I do, Mr. Markey.

Mr. MARKEY. The question I guess I am asking is whether or not we should use perhaps the fees from anything that comes from the Federal Government to have Federal funding needed so that we could upgrade State and local 9-1-1 systems, to make them ubiquitous.

Mr. DAUB. That would be a good idea.

Mr. MARKEY. Would that make sense?

Ms. HOYT. ComCARE urges Congress to codify the 1995 Presidential Order directing Federal agencies to work cooperatively with wireless carriers to allow siting on their properties and the income from the leasing fees, we feel, should be dedicated to support Block Grants to the States and to fund the research components that were mentioned a little bit earlier.

Mr. MARKEY. The Park Service Director Robert Stanton has made siting of communications facilities a priority and has expressed a willingness to work with carriers on applications. I applaud Director Stanton's initiative. My concern is what is the extent to which there is now an effective implementation of that.

What process does the Park Service have, in your opinion, that makes it possible for us to have siting on public lands that could be effective? Do any of you have a comment on that? We'll have testimony later on this issue.

Mr. HEINRICHS. Congressman, the one thing I can say is that it's my perspective in the industry that the Federal process for siting

is slow enough that it's not particularly competitive with the private processes. And if there's any mission here it would be to accelerate that.

Mr. MARKEY. Okay. Thank you.

Mr. HARGARTEN. Mr. Markey, I'd like to echo Sue Hoyt's comment about the dollars coming back to EMS in supporting local and State EMS development.

Mr. MARKEY. There has been a dramatic improvement in the use of communications services since I was a boy, and I was run over by an automobile when I was 5 years old—out in the middle of the street, two blocks from where I should be—and the driver was paralyzed behind the wheel, doesn't move.

And all I remember is just being picked up and slid into the back seat of a car and then someone driving 90 miles an hour until I am in the emergency room. And there's only two things your mother tells you, okay, when you are 5 years-old.

In case of an accident your name is Eddie Markey, your telephone number is M-A-4-0-8-1-5. And second, whatever you do, change your underpants every day because if there's an accident, I'm going to be completely humiliated, you know, by the fact that they're going to find that you didn't change your underpants.

So I am there and I now have—the doctor says, "What's your name?," and I said, "My name is Eddie Markey. M-A-4-0-8-1-5," and presently I can hear—my mother's on the phone and talking to the doctor right over me. "Do you have a little boy, 5 years-old?" "He just got hit by an automobile. We need permission to be able to operate, do whatever here with him."

By the way, you never forget getting run over by 3,200 pounds of steel. It's like one of those moments in your life. And so she says okay, and that's your emergencies. That's how you use the phone system in order to make sure that people are getting the proper treatment that they need. They've just been in an accident.

And so my mother gives permission, and then the second thing that happens is now, given permission the nurses are coming over and trying to unbutton my pants, and I've got all these broken fingers from where I landed, even today, but there's one thing I am going to do—is that I am going to hold onto my pants because these nurses are not going to find out that I didn't change my underpants, okay.

And at that, the last memory is just being put out, you know, so that emergency room doctors can properly treat at that point in time.

So, the chairman is very glad I came back.

Anyway, thank you, Mr. Chairman. Brilliant panel. I yield back the balance of my time.

Mr. TAUZIN. Thank you, Mr. Markey. Again thank you all. I think you've contributed immensely to progress on this issue.

We'll now convene the second panel, which will include the Honorable Denis Galvin, Deputy Director of the National Park Service; Mr. David Bibb, Deputy Associate Administrator, Office of Real Property; and Mr. Thomas E. Wheeler, president of Cellular Telecommunications Industries Association.

I think, Ed, maybe we can get some answers to some of those questions you asked about Federal land siting and the proceeds from those sitings.

We'll begin again by reminding you that your written statements are part of the record. Again, as the other witnesses did, if you'll summarize and give us the high points we'd deeply appreciate it. The Honorable Denis Galvin, Deputy Director of the National Park Service, will go first. Dennis, welcome.

STATEMENTS OF HON. DENIS P. GALVIN, DEPUTY DIRECTOR, NATIONAL PARK SERVICE; DAVID BIBB, DEPUTY ASSOCIATE ADMINISTRATOR, OFFICE OF REAL PROPERTY, OFFICE OF GOVERNMENTWIDE POLICY, GENERAL SERVICES ADMINISTRATION; AND THOMAS E. WHEELER, PRESIDENT, CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Mr. GALVIN. I will summarize my statement, Mr. Chairman. The National Park Service has been contacted by wireless companies since about 1994 with respect to siting facilities in National Parks, and we have been working with the industry since then.

A previous witness mentioned the President's Executive Memorandum on August 10, 1995. That memorandum directed Federal agencies to facilitate appropriate access, but it also listed several qualifying provisions with respect to National Parks.

It said that the sitings should be in accordance with Federal, State, and local laws and regulations; should meet environmental and aesthetic concerns; should accommodate preservation of historic buildings and monuments, protection of natural and cultural resources, and protection of National Parks and wilderness values.

Subsequent to that, we met with industry representatives and drafted policies and procedures. During that period the Congress passed the Telecommunications Act. The President signed it on February 8. On March 29, GSA issued a notice that enhanced the procedures set in place in the summer of 1997.

Congress provided additional instructions to the National Park Service in the Conference Report with the 1997 Interior Department appropriations act saying the Service "should promulgate rules which ensure that the public has the opportunity to participate fully." With the guidance and requirements established, the National Park Service formed a task force whose members were drawn from the telecommunications industry and Service personnel. The purpose was to draft policies and procedures regarding permitting telecommunications. The draft policy statement was published in the Federal Register in the summer of 1997, and a final policy statement issued as Director's Order 53A on December 11.

Draft guidelines have been published in the Federal Register in February 1998. The 60-day comment period will end on April 24, 1998.

We surveyed the parks in the summer of 1997 concerning requests to site telecommunication antennas in the parks. Twenty-one parks indicated they had had some activity in this category. Only five had received a combined total of 12 written applications, with the other 16 parks receiving approximate 50 phone or other verbal inquiries.

I believe this record shows that the National Park Service has been willing to work with both the telecommunication industry and the public on the question of siting antennas in units of the National Park system. We feel we are complying with both the provisions and intent of the Telecommunications Act of 1996.

That concludes my summary, Mr. Chairman.

[The prepared statement of Hon. Denis P. Galvin follows:]

PREPARED STATEMENT OF DENIS P. GALVIN, DEPUTY DIRECTOR, NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR

Mr. Chairman, thank you for the opportunity to present the Department's views on siting telecommunication antennas in National Parks in compliance with the Telecommunications Act of 1996.

In 1994 and early 1995, the National Park Service experienced a growing number of contacts with multiple companies across the nation, inquiring about the possibility of siting wireless antenna facilities on Service property. By that time there already were a few sites constructed and operating in some parks. At the same time, we were contacted by the Cellular Telecommunications Industry Association (CTIA), requesting knowledge of and input into our then developing policy and guidance for this subject.

On August 10, 1995, an executive memorandum from the President directed the heads of all Departments and agencies to facilitate access to federal property for the purpose of siting mobile service antennas. While the memorandum directed agencies to "facilitate appropriate access" to their properties for the siting of these antennas, it also listed several qualifying provisions. Such siting should be in accordance with: 1. Federal, State, and local laws and regulations; 2. Environmental and aesthetic concerns; 3. Preservation of historic buildings and monuments; 4. Protection of natural and cultural resources; and 5. Protection of National Park and wilderness values.

The National Park Service, in conjunction with the CTIA and other industry representatives, had been drafting policy and procedures specific to telecommunications and immediately included these precepts into their work in progress.

On February 8, 1996, the President signed the Telecommunications Act of 1996 (47 U.S.C. 332). Section 704(c) of the Act requires the President to develop procedures by which federal departments and agencies may make available federal properties, rights-of-way, and easements for wireless telecommunication services. On March 29, 1996, the GSA issued a notice in the *Federal Register* (61 FR 14100) of general procedures for implementing the provisions of Section 704(c) of the Act. The GSA issued an enhancement of these procedures in the summer of 1997 that clarified and emphasized the same points as they had previously stated. Congress provided additional instructions in the Conference Report it issued with the FY 1997 Interior Department appropriations act (P.L. 104-208). The report states the Service "should promulgate rules which ensure that the public has the opportunity to participate fully and comment on the issuing of permits, rights-of-way or easements for any telecommunications facility placed in any unit of... the National Park System."

With the guidance and requirements established, the National Park Service formed a task force whose members were drawn from the telecommunications industry, the CTIA, and personnel from every region of the Service. The purpose of this task force was to draft policy and procedures regarding permitting telecommunications. This was a difficult task since the Act directed federal agencies to implement siting these facilities and to avoid the derogation of park resources, values or purposes for which the parks had been established.

A draft policy statement was written and published in the *Federal Register* for comment in the fall of 1997. In addition, the Service held meetings with industry and the public to receive their input. On December 11, 1997, the Service published its final policy statement on Wireless Telecommunications as Director's Order #53A. This order points out that Congress and the President have established a compelling federal interest in promoting the efficient implementation of the new telecommunications technology. The Park Service will follow the requirements and intent of the Act, the executive memorandum, and the GSA procedures while also recognizing its responsibility for complying with provisions of the National Park Service Organic Act and other statutes applicable to the operation of units of the System.

Once the policy statement was approved and distributed, the Service undertook development of procedural guidance to assist park managers in implementation of the policy. Draft guidelines were published in the *Federal Register* in February

1998, for public comment. The 60-day comment period will end on April 24, 1998. After full review of these comments, the procedures for siting telecommunication facilities in the National Parks will be finalized and published.

We surveyed the parks in the summer of 1997 concerning requests to site telecommunication antennas in the parks. Of the 21 parks indicating they had had some activity in this category, only 5 had actually received a combined total of 12 written applications, with the other 16 parks receiving approximately 50 phone or other verbal inquiries.

In conclusion, I would like to say that the National Park Service has shown its willingness to work with both the telecommunication industry and the public on the question of siting telecommunication antennas in units of the park system. Our policy statement on this subject has been finalized and distributed. The procedural guidance implementing that policy should be published no later than the end of May of this year. We feel that we are fully complying with both the provisions and the intent of the Telecommunications Act of 1996.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any of your questions.

Mr. TAUZIN. Thank you very much, sir. Mr. David Bibb, the Deputy Associate Administrator of the Office of Real Property of the GSA.

STATEMENT OF DAVID BIBB

Mr. BIBB. Thank you, Mr. Chairman. As you've asked, I'll be giving an abbreviated version of my statement.

Mr. TAUZIN. Thank you, sir.

Mr. BIBB. My office, the Office of Governmentwide Policy at GSA, is generally concerned with real property issues of governmentwide interest and application. Also in GSA the Public Building Service has custody and control of approximately 1,900 Federal buildings, and we lease thousands more.

GSA has taken a leadership role in implementing both the Presidential Memorandum and the spirit of the 1996 Act. To begin with, our Public Building Service has aggressively marketed its antenna out-leasing program. We currently maintain 64 out-leases. To date we have not rejected any antenna siting requests.

These out-leases are yielding $1.02 million annually, and income will reach we think $1.5 million per year by the end of this summer. GSA has authority, under the Public Buildings Cooperative Use Act, to retain the proceeds from these out-leases in its Federal Buildings Fund, which is a revolving type fund. That has created a very strong incentive within the agency to make properties available and to pursue antenna out-leases.

My office, the Office of Governmentwide Policy, published Federal Property Management Regulation bulletins in 1996, 1997 and 1998. The purpose of the bulletin was to provide all Federal agencies with general guidelines and procedures for implementing the Memorandum and the 1996 Act. Also in response to discussions with the wireless industry, we conducted a series of three forums in the spring of 1997, one for all the Federal agencies, one for the Federal agencies and the CTIA, and one for the industry only.

As we conducted the forums there was considerable—actually an overwhelming—sentiment from the agencies that nothing could do more good for the agencies to push the program than to be allowed to retain funds to at least cover their costs of implementing the program. Many said they'd like more than that, but they said there's a minimum to cover the costs.

Based on our experience with the Public Building Service inventory and just to give you an idea of the magnitude of dollars that might be out there. It's early. It's still early in the game, but as I indicated before, the Public Building Service expects to bring in about $1.5 million per year by this summer.

We can see that number growing perhaps to $5 to $7 million, based on the activity we've had, and the web that can be created in metropolitan areas; but what we are talking about in my estimation governmentwide is millions, not billions, and a relatively modest number of millions at that.

One last statement, agencies that currently can retain the proceeds from out-leasing antenna sites have indicated they believe it would be extremely important to be able to continue to do that, to give the program the priority and the attention that it needs. It's one thing to comply with the letter and the spirit of the law, but agencies like GSA which have a very aggressive program, have gone beyond that to market at trade shows and to actually reach beyond the spirit of the law to bring in new business.

[The prepared statement of David Bibb follows:]

PREPARED STATEMENT OF DAVID BIBB, DEPUTY ASSOCIATE ADMINISTRATOR, OFFICE OF REAL PROPERTY, OFFICE OF GOVERNMENTWIDE POLICY, GSA

Good afternoon, Mr. Chairman, Mr. Ranking Member and members of the Subcommittee. Thank you for the opportunity to appear before you today to discuss antenna siting matters. I am the Deputy Associate Administrator for Real Property in the General Services Administration's (GSA) Office of Governmentwide Policy. My office is generally concerned with real property issues of governmentwide interest and application. Under the Federal Property and Administrative Services Act and the Public Buildings Act, GSA's Public Buildings Service (PBS) has custody and control of approximately 1900 Federal buildings and leases thousands more. As part of my testimony I will address what PBS has done in its efforts to make the properties under its custody and control available to telecommunications service providers.

Since 1995 the Federal government has played a role in the construction of the Nation's wireless communications infrastructure by implementing the President's August 1995 Memorandum on Facilitating Access to Federal Property for the Siting of Mobile Service Antennas and assisting agencies in interpreting and complying with Section 704(c) of the Telecommunications Act of 1996 (1996 Act).

Under current law, agencies such as GSA, the Department of the Interior's Bureau of Land Management, the Department of Defense (DOD), the Department of Energy, the Bonneville Power Administration, and the Tennessee Valley Authority are authorized to retain the full proceeds from outleasing antenna sites. As you know, section 704(c) of the 1996 Act is silent on where any proceeds from these telecommunications service outleases are to be deposited. That means for most Federal agencies, proceeds from section 704(c) outleases must be deposited into the Treasury as miscellaneous receipts.

GSA has taken a leadership role in implementing both the Presidential Memorandum and the spirit of the 1996 Act. To begin with, PBS has aggressively marketed its antenna outleasing program and currently maintains 64 such outleases. To date, PBS has not rejected any antenna siting application. These outleases yield $1.02 million annually, and it is expected that income will reach $1.5 million per year by the end of this summer. GSA has existing authority, under the Public Buildings Cooperative Use Act, to outlease the rooftops of Federal Buildings for commercial purposes. GSA also has authority to retain the proceeds in PBS's Federal Buildings Fund for real property operational purposes. GSA has a strong incentive to make these properties available to the telecommunications industry.

The Office of Governmentwide Policy, Office of Real Property published Federal Property Management Regulations (FPMR) bulletins in 1998, 1997 and 1996. The purpose of these bulletins is to provide all Federal agencies with general guidelines and procedures for implementing the Memorandum and the 1996 Act. In response to the wireless industry's needs, GSA sponsored three antenna siting forums in the spring of 1997, one for the Federal landholding agencies, one for the telecommuni-

cations industry, and one joint forum. As a result, industry and agency representatives met to discuss important issues that were raised in the forums. Some of these issues included, development of procedures for evaluating site requests, providing timely responses, establishing an appeals process, site security, site access and tracking of requests and denials.

Since we held the forums we have seen an increase in governmentwide antenna siting activity. In 1997, Federal agencies reported receiving 340 antenna siting requests in the June through December time frame. Only 10 requests or 2.9% were denied.

PBS and DOD, which each have authority to retain full proceeds, are agencies that have executed large numbers of antenna outleases. Both agencies have issued their own antenna policies, have advertised and marketed their properties, attended industry trade shows, and have personnel dedicated to antenna outleasing activities. For example, PBS, which can place all of its antenna leasing proceeds into its Federal Buildings Fund, presently has 64 antenna outleases totaling $1.02 million annually; it anticipates that income will reach $1.5 million per year by the end of this summer.

Although PBS holds 10 percent of the Federal Government's building space its properties are typically much more urban in character than the vast majority of Federal real estate holdings. Therefore its income potential from antenna site leases is greater than other agencies can expect. Based on the PBS experience, and applying it to the governmentwide inventory, we believe that there is the potential to raise millions of dollars, but not billions.

However, our data indicates that other Federal agencies are experiencing varying levels of activity in outleasing sites for antennas to the wireless telecommunications industry. GSA believes that one explanation for these varying results is that the current state of the law runs contrary to sound asset management principles.

In our view, property managers are more willing to take on additional activities when they have funding for those activities. GSA has begun to actively market antenna outleasing opportunities and operate a successful antenna outleasing program, in part, as a result of its authority to retain the full proceeds from those outleases. GSA uses these proceeds to cover the administrative costs of the antenna program, as well as to help fund urgently needed maintenance and minor property renovation. While outlease proceeds are not of the magnitude needed to fund our programs, use of these proceeds, over the long run, reduces the agency's need to tap other sources of funds, such as annual appropriations or the Federal Buildings Fund.

During the forums we held in the spring of 1997, an overwhelming number of Federal agencies stated that they wanted to retain the full proceeds from fees collected from outleasing antennas. The agencies indicated that without an economic incentive, they most likely could not assign a high priority to the outleasing program, given other competing demands for their limited staffing and contracting resources. In many cases, these antenna transactions can be very complex and time-consuming, due to environmental, security, and historic preservation concerns. To devote significant staff time and resources to antenna outleases, the agencies uniformly indicated that they would need funds, at a minimum, to cover their expenses.

It follows then that agencies which currently can retain the full proceeds from antenna outleasing have indicated that their continued retention is critical. They have stated that without the economic incentive their programs would be expected to drop off as resources are shifted to more compelling needs.

Again, Mr. Chairman, I appreciate having the opportunity to appear before you today, and I would be pleased to answer any questions the Subcommittee may have.

Mr. TAUZIN. Thank you, Mr. Bibb. And finally, Tom Wheeler, President of Cellular Telecommunications Industry Association. Tom, you've been here before. You know the rules.

STATEMENT OF THOMAS E. WHEELER

Mr. WHEELER. Thank you very much, Mr. Chairman. We appreciate the opportunity to be here today. You know, I was reading in the American Demographics magazine a couple of months ago that the average American spends more time on the road than eating, and that two-thirds of that time in the car is spent alone. Now for 57 million wireless subscribers, they aren't alone, and that's why they make 83,000 emergency calls a day to wireless phones.

Today's topic is how to make that user even safer, and I won't reiterate what that great first panel talked about, but it seems to me that it comes down to three things: No. 1, there is a confusion about what number to call. No. 2, there is a question of will the call go through and will it reach a tower. And No. 3 is the question of once the call goes through, is it going to go to the right public safety agency.

There is a rare opportunity that exists literally at this point in time that the Congress can seize upon to expand safety by siting on Federal property and to pay for the necessary public safety improvements through those funds. Now, as you know, on the question 9-1-1 only the Congress can make it a national number. The FCC cannot make it a national number.

The Congress can also speed the next deployment of the next generation of 9-1-1, referred to as E9-1-1. The industry and the PSAPs got together and worked out an arrangement to make it work. The industry has put together technology to make it work. Now the problem is we got 15,000 local fiefdoms in the form of these independent public safety access points that need some kind of a coordination.

We are not saying that Congress should step in and tell them what to do, but Congress can encourage them through various incentives to coordinate their policies to solve some of the problems Mayor Daub was talking about.

The Congress can also tell the Federal agencies to get serious about siting. And with all due respect to my colleagues here on the panel, this is a crucial first step, to connect the dots and then to raise the funds to upgrade the systems. And this must be understood to be an opportunity which is fleeting. Sites must be constructed. If not on Federal property, they'll be constructed someplace else, but there is very much a time-to-market issue.

And the Federal activities, again with due respect to these gentlemen, have not been as supportive as they could be in terms of timely siting of antennas on Federal property, nor have they been following the instructions from either the Congress or the President to be responsive in that regard.

And look at the track record just for a second. In August 1995 the President issues a memorandum saying facilitate siting. Six months later in June 1997—I am sorry, in February 1996, Congress passes the Telecommunications Act. In June 1997—not until June 1997 does GSA issue its Advisory to the agencies on what the guidelines should be. Twenty-two months after the Federal Order, 16 months after the passage of the Act, and what do those guidelines say?

Those guidelines say that you have to have a preliminary response within 60 days. That response can be, "We're still thinking about it." There is no incentive in that kind of an environment for a wireless carrier who has a time-to-market problem or imperative to deal with the Federal agency.

You know, in Virginia they just passed a law that said 90 days you either make the decision or it's presumed to have been approved, for the State of Virginia. Now that makes a lot of sense. We ought to be able to do that for our Federal agencies because when you get right down to it, siting delayed is safety denied.

And that's what we are talking about here—not that these gentlemen in their agencies aren't trying to do the right thing, but there's a delay process in here. We have a rare opportunity we're looking at right now. Thirty percent of all of the geographic area of the United States is Federal land, plus thousands of buildings.

The wireless industry is going to need 100,000 sites over the next 5 years. If only 20 percent of those sites end up on Federal property—only 20 percent—and the going rate is charged, that's $1.5 billion in revenue over 5 years that can then be redirected to fund the kind of safety programs, safety enhancement programs, that you heard the first panel talking about.

Congress can stop the squandering of this opportunity. It can encourage, it can require Federal siting, and it can redirect siting leases to promote safety. We heard today in the first panel about a brave new tomorrow and what it can mean to people's safety. It's time to take the first step to that tomorrow and the vehicle for doing it is right here. Site the antennas. That promotes safety. Use that revenue to increase the safety support services.

[The prepared statement of Thomas E. Wheeler follows:]

PREPARED STATEMENT OF THOMAS E. WHEELER, PRESIDENT & CEO, CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Thank you, Mr. Chairman, and members of the Subcommittee, for the opportunity to present testimony on the role wireless communications plays in improving the safety of all Americans. The Wireless industry is founded on innovation, competition, and safety. Today, my testimony will focus on the safety aspects of the wireless industry and show how our industry has combined the benefits of innovation and competition to deliver unprecedented benefits and safety options for consumers across America. I hope to explain how far the wireless industry has come in deploying networks that carry emergency communications, and how beneficial our networks and services are to Americans during emergency situations, and how, if we all work together—government, public safety officials and medical experts, and the wireless industry—can make substantial improvements to the emergency services we currently provide. I am Thomas E. Wheeler, President and CEO of the Cellular Telecommunications Industry Association (CTIA), representing all categories of commercial wireless telecommunications carriers, including cellular and personal communications services (PCS).[1]

Wireless: A Vital Safety Link for 57 Million Americans

Wireless telecommunications service was initiated for the first time in the United States in 1983. Since that time, wireless telephone service has grown faster than any other communications service in history, with over 57 million Americans currently subscribing. Since 1968, the numbers 9-1-1 have been reserved for emergency services, and 9-1-1 service has slowly spread across the nation.[2] Through the efforts of countless public-spirited men and women, the American people have now been educated to call 9-1-1 when they need help. Every day, more than 83,000 wireless calls go to 9-1-1 or other emergency service numbers. A recent survey showed 35% of wireless phone owners have used their phones in an emergency or life-saving situations.[3] 88% of people planning to buy a wireless phone rated security the highest reason for the purchase.[4] Wireless phones have become an integral part of our lives and provide an invaluable safety link.

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[1] CTIA is the international organization which represents all elements of the Commercial Mobile Radio Service (CMRS) industry, including cellular, personal communications services, wireless data. CTIA has over 750 total members including domestic and international carriers, resellers, and manufacturers of wireless telecommunications equipment. CTIA's members provide services in all 734 cellular markets in the United States and personal communications services in all 50 major trading areas, which together cover 95% of the U.S. population.

[2] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 94-102, 11 FCC Rcd. 18676, 18678 (1996).

[3] Peter D. Hart Research Associates, February 1998.

[4] Peter D. Hart Research Associates, February 1998.

Wireless 9-1-1 & Distress Calls

Year	Subscribers	U.S. 9-1-1	U.S. 9-1-1 Monthly	U.S. 9-1-1 Daily
1985	340,213	193,333	16,111	530
1986	681,825	649,659	54,138	1,780
1987	1,230,855	1,202,336	100,195	3,294
1988	2,069,441	2,382,855	198,571	6,528
1989	3,508,944	4,311,497	359,291	11,812
1990	5,283,055	5,914,653	492,888	16,205
1991	7,557,148	8,007,586	667,299	21,939
1992	11,032,753	12,641,470	1,053,456	34,634
1993	16,009,461	15,491,344	1,290,945	42,442
1994	24,134,421	17,910,620	1,492,552	49,070
1995	33,785,661	20,059,894	1,671,658	54,959
1996	44,042,992	21,659,967	1,804,997	59,180
1997	N/A	30,517,327	2,543,110	83,609

Sources: Cellular Telecommunications Industry Association, Cellular Carriers Association of California, California Highway Patrol, AT&T Wireless, Minnesota's Department of Transportation, New York State Police, and other state officials.

Wireless Helps Communities Respond to Disasters

Wireless services help communities respond to disasters by providing critical communications to EMS providers & citizens in time of need. The record-breaking ice storms, which struck Maine, Vermont, New York, Ontario and Quebec this January, crippled utility services and affected millions of people. Wireless service survived, and was effectively used as the preferred communications link to help others in restoring power and rescuing people from the elements.[5] In Maine, the Central Power Maine Co. equipped its people with more than 750 cellular phones "so the hundreds of crews working to restore power could function effectively."[6] In Canada, thousands of phones were distributed to help aid storm victims.[7] In Vermont, the American Red Cross wrote, "The use of cell phones has become a valuable resource to the Red Cross during disaster relief operations, and consequently, this form of communication has become part of our disaster response plan." The Executive Director continued, "Quite frankly, I don't know what we would have done without them during the ice storm relief effort."[8]

This is not the first time that wireless services have come to the aid of communities confronting disasters. In fact, this type of assistance has become the hallmark of the Wireless industry. We take great pride in this utilization of wireless technology. We are proud to join the cadre of EMS, fire, police, and medical personnel in the ComCARE Alliance; an organization dedicated to promoting a comprehensive end-to-end communications system to enhance public safety. Wireless systems have aided communities and individuals in fires, floods, hurricanes and man-made disasters. In 1997, Congressman Earl Pomeroy declared that "wireless communications can be a real life saver in an emergency. During the flooding disaster in North Dakota, wireless phones helped residents stay in constant contact as they laid tens of thousands of sandbags to fight the rising Red River. When regular phone service was knocked out, wireless communications helped serve as a lifeline to restore links between families, communities and emergency crews."[9]

During Hurricane Fran, traditional wired telephone service and electrical power went out, but wireless telephone service kept on working. As one newspaper in North Carolina observed, "Many Triangle residents found their cell phones to be the only thing that worked in the aftermath of the storm... That made wireless the prin-

[5] Lisa Larson, "Wireless service heats up during ice storm," RCR, January 19, 1998 (cellular service reported up 1,000 percent in New England).

[6] Frank Fisher, "Maine Counties Are Disaster Areas," AP Online, January 14, 1998.

[7] "Wireless Companies Aid Storm Victims," *CWTA Communique,* January 16, 1998 (reporting donations to "Hydro-Quebec, the Canadian military, municipal governments, local police forces, community centres and others").

[8] Letter to Bell Atlantic from James W. Peterson, Executive Director of the American Red Cross Northern Vermont Chapter, February 3, 1998.

[9] "Congressman Honors Wireless Heroes at CTIA's National Vita Awards Ceremony," May 21, 1997, http:Hwww.wow-com.com.

cipal form of communications for much of the day and the weekend."[10] In fact, none of the Cellular One sites in the Triangle area were destroyed by the storm.[11]

Indeed, the importance of wireless in dealing with hurricanes has been widely recognized. Hotels and resorts in the Caribbean have been advised to equip their staff with cellular phones so "they can stay in contact when land lines go down." Two years ago, cellular phones were used by meteorologists in both the U.S. and Cuba to chart the changing course of Hurricane Lili.[12]

Wireless phones have been valuable in non-natural disasters as well. In March 1996, BellSouth Cellular equipped the local chapter of the American Red Cross with wireless phones to help evacuate 2,500 residents from the town of Weyauwega, WI, after a train loaded with liquid propane derailed, unleashing a cloud of toxic fumes and disabling the traditional wired phone system.[13]

Other carriers, such as Bell Atlantic NYNEX Mobile, Comcast Cellular, GTE Mobilnet, Nextel Communications, and US WEST Cellular, have also established programs to deliver phones and service to agencies responsible for coping with disasters from the Blizzard of '96, to the crash of TWA Flight 800, to helping in crimefighting.[14]

The wireless industry, as individual carriers and acting through CTIA and the CTIA Foundation for Wireless Telecommunications, is hard at work utilizing wireless technology to fight crime. Service providers and manufacturers donate service and equipment both to help in sudden emergencies, and as part of an on-going effort to help fight crime in communities nationwide. As part of the "Communities on Phone Patrol" (COPP) program, wireless phones and airtime have been donated to more than 8,000 community watch patrols across the county, helping to fight crime in communities where more than 150 million Americans live.[15] I know that the Chairman is familiar with the ClassLink program, through which carriers donate wireless phones and airtime to teachers to increase their efficiency and to increase the safety of their students.

The Wireless industry is embarking on another program—the Wireless Family Alliance. Through the Wireless Family Alliance, wireless carriers donate phones and airtime to organizations assisting victims and potential victims of domestic violence. These donated phones are a vital safety link for program participants and are helping, right now, to makes families safer all over America. Mr. Chairman, I invite you and your colleagues to join the wireless industry in this community-based effort to reduce violent crime in our families.

Improving the Nation's Emergency Communications System

Although the numbers 9-1-1 have been reserved and many areas have some sort of emergency service, *we do not have a uniform national 9-1-1 policy.* Between 27 million and 40 million Americans do not have access to 9-1-1 service, wireless or wireline. Half of the geographical area of the United States is not covered by 9-1-1, and of that half, varying numbers are used in individual states.[16] Fewer than 50 percent of the American people know the telephone numbers of the police, fire and emergency medical service providers in their own communities, let alone the numbers of public safety agencies in the communities they pass through when they trav-

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[10] Kyle Marshall, "Cellular services undaunted, but some calls go awry," *Raleigh News and Observer,* September 10, 1996 (noting "Hurricane Fran might have blown telephone poles and power lines over, but it didn't have much effect on cellular phone transmitters and the air between them"—although some calls "roamed" in local service areas).

[11] Id.

[12] Deborah Ramirez *et al,* "Brush with Lili; Storm Brings Floods to Cuba, Destroys Homes," *Sun-Sentinel (Fort Lauderdale),* October 19, 1996, at 1A.

[13] Rikki Lee "Carriers Increase Relief Programs: Operators Offer Phones, Airtime to Local Agencies," *Wireless Week,* April 1, 1996, at 22.

[14] *Id.* (re Bell Atlantic NYNEX Mobile and Comcast Cellular during the Blizzard of '96, GTE during Hurricanes Erin and Opal, and U S WEST in dealing with floods, range fires, and ice storms). Nextel Communications has also donated their services in crimefighting. *See* "Nextel Helps Detroit Keep the Devil Out of Devil's Night," *PR Newswire,* September 26, 1996.

[15] *See e.g.,* Robin Frames, "City Gets Crime-Fighting Help," *Albuquerque Journal,* December 10, 1997, at D4. See also Kay S. Pedrotti, "COPPs are armed with phones; BellSouth helping citizens reduce crime in East Point," *The Atlanta Journal and Constitution,* August 14, 1997, at 03K.

[16] The State of Minnesota's Department of Administration estimates 9 percent of the U.S. population is not covered by 9-1-1. See http://www.admin.state.mn.us/intertech/services/svnc91nc.html. The National Emergency Number Association (NENA) homepage estimates that 15 percent of the population and half of the geographical area of the U.S. are not covered by 9-1-1 service. See "The Development of 9-1-1" at http://www.nena9-1-1.org/History%20of%20NENA%20and%20911/history3.htm.

el across America.[17] This lack of information threatens the safety of millions of people.

The delays experienced by callers trying to reach emergency service providers cost more than just time, lives are lost. Faster access to emergency services through 9-1-1 will result in faster responses by police, fire and medical workers. The time saved will preserve lives, save homes, and cut crime.[18]

To help guarantee that people get through to emergency services and get the help they call for, when and where they need it, we need a national policy on emergency communications. With the technology that already exists, working within a uniform nationwide framework, we can encourage consistency and an improved level of service, thus accelerating response time to emergencies.

A National 9-1-1 Policy will Facilitate the Implementation of Enhanced 9-1-1

In November of last year, the Federal Communications Commission (FCC) issued its *Report and Order* and *Further Notice of proposed Rule Making* (FNPRM) on Enhanced 9-1-1 emergency calling systems. The Report and Order states specifically that the FCC's E-911 requirements for Phase I implementation and Phase II implementation shall apply only if:

1. A carrier receives a request for such E-9-1-1 services from the administrator of a Public Safety Answering Point that is capable of receiving and utilizing the data elements associated with the services; and
2. A mechanism for the recovery of costs relating to the provision of such services is in place. Other requirements include:
   - **Code identification 911 Calls:** Not later than 12 months after the effective date of the FCC's rules adopted in this proceeding, covered carriers, which includes all cellular and broadband PCS licensees and certain SMR licensees, must process and transmit to any appropriate PSAPs all 911 calls made from wireless mobile units which transmit a code identification, including calls initiated by roamers.
   - **Non-code identification 911 Calls:** In the case of 911 calls made from wireless mobile units that do not transmit a code identification, not later than 12 months after the effective date of the FCC's rules, covered carriers must process and transmit such calls to any appropriate PSAP which previously has issued a formal instruction to the carrier involved that the PSAP desires to receive such calls from the carrier.
   - **Phase I Requirements:** Not later then 12 months after the effective date of the FCC's rules, covered carriers must have initiated actions necessary to enable them to relay a caller's ANI (Automatic Number Identification) and the location of the base station or cell site receiving a 911 call to the designated PSAP. These actions must be completed not later than 18 months after the effective date of the rules.
   - **Phase II Requirements:** Not later than five years after the effective date of the rules, covered carriers must achieve the capability to identify the latitude and longitude of a mobile unit making a 911 call, within a radius of no more than 125 meters in 67 percent of all cases.

The FCC also directs covered carriers, in coordination with the public safety organizations, to resolve certain E911 implementation issues, including grade of service and interface standards, through industry consensus in conjunction with standard-setting bodies. Although the FCC Order directs wireless carriers to make substantial investments in location technology and other improvements, but the FCC Order does not:

- Establish 9-1-1 as the National primary emergency number.
- Encourage States to develop uniform 9-1-1 improvement plans.
- Provide accelerated access to Federal property.
- Extend the same indemnification to wireless carriers that currently applies to wireline telephone companies.

Complying with the FCC's E-9-1-1 Order will involve substantial investments for state and local governments, public safety organizations, and the wireless industry. Yet, the United States has no comprehensive national 9-1-1 policy (or even the formal designation of 9-1-1 as the Nation's primary emergency number). A federal policy that addresses the above points will ensure that states, local governments, and wireless carriers are building an enhanced 9-1-1 system that is uniform across the entire nation and consistent within each state.

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[17] See "How 9-1-1 Works" at http://www.nena9-1-1.org/History%20of%20NENA%20and%20911/history4.htm.

[18] Id.

National Focus: Benefits of a Uniform National 9-1-1 Policy

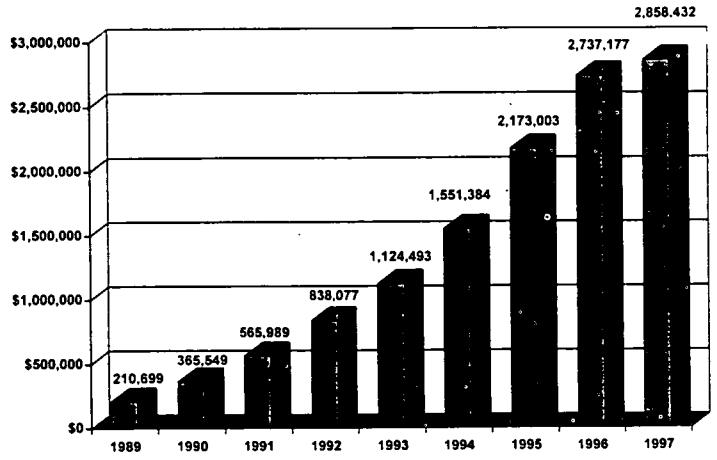
In some states the emergency number 9-1-1 is not used for wireless. For example, in Cook County, Illinois, cellular callers to 9-1-1 get a recording telling them to call *999. That does not give them a 9-1-1 center, but a private contractor who relays calls and is not trained to handle medical emergencies. This lack of knowledge could be tragic to a visitor to the county.

For instance, a couple from Kansas witnessed a drunk driver while traveling on a highway in Missouri. Unaware that the Missouri wireless number for the Highway Patrol is *55, the couple was delayed in their attempts to report the drunk driver to authorities. In the meantime, the drunk driver had a head-on collision and killed the three people in the oncoming car, including a two year-old child. As stated by Representative Pat Danner (MO-6th) in his December 8, 1997 editorial to the *Kansas City Star*, "If a motorist were to travel from Kansas City to Washington, D.C. on Interstate 70, the traveler would have to know to dial *55 in Missouri, *999 in Illinois, 911 in Indiana, *DUI in Ohio, 911 in Pennsylvania and *77 in Maryland... Further, in the United States as a whole, there are as many as 15 different cellular assistance numbers. The system simply should not be so convoluted."

Congressional action to designate 9-1-1 as the universal emergency telephone number in the U.S. would provide protection to all Americans against these types of senseless tragedies. A uniform national primary emergency telephone number is increasingly important because so many Americans use wireless telephones to report emergencies, and, increasingly, these same Americans are using their wireless phones outside of their local service area (in areas where they are less likely to know the local primary emergency number if that number is not 9-1-1.)

Wireless Use Outside Home Service Area Increases

(as measured by roaming revenue)



State Focus: Benefits of Statewide 9-1-1 Plans

The emergency communications needs of the United States are currently served by 15,000 Public Safety Answering Points (PSAP's). These PSAPs are generally housed within local governmental organizations such as local police or fire department. Each of the PSAPs are autonomous units, without sharing the same primary emergency calling number (i.e., 9-1-1). Some states have adopted uniform statewide 9-1-1 implementation plans, and designated a single official in charge of 9-1-1 for the entire state in order to have better emergency communications services. Other states send wireless 9-1-1 calls to a state police office, even if it is located miles away from the emergency. Comprehensive and coordinated state plans are needed so that calls get routed to the appropriate place in a timely manner. Additionally, state and local dispatch systems need financial help to upgrade their capabilities to address wireless 9-1-1.

Local Focus: No Signal, No Emergency Call—the Need for Local Placement of Wireless Facilities

Federal, state, and local governments have a responsibility to ensure emergency communications are available to everyone. Federal policy has been very clear in encouraging the construction of ubiquitous, seamless wireless networks. Despite provisions in the Telecommunications Act of 1996 and directives from the Executive Branch, federal agencies and in some instances, local governments are stalling or blocking the completion of wireless networks. In some areas there are "dead spots" where calls cannot be made because there are no antennae, or networks are unable to expand their capacity to address rapidly expanding demand. A series of new wireless competitors are now trying to build out their systems to provide service and compete for customers, but resistance has slowed their progress and delayed competition. Without antennae, there is no communications network, and no 9-1-1 calls are possible. The call has to go through for help to be sent on its way. Further, the location requirements Ordered by the FCC typically utilize a technology that establishes the position of the 9-1-1 caller using triangulation from the three closest wireless antennae. Because the Federal government owns almost 30% of all land in the United States, a crucial component of a national policy on 9-1-1 is a process to accelerate antenna siting on Federal property. Such a policy will ensure that the facilities necessary to ensure completion and location of 9-1-1 calls are available all over the nation when those emergency calls are placed. An example of why accelerated siting of antennae on Federal property is important is Rock Creek Park, right here in Washington, D.C. Although the park is heavily used by thousands of people every day for recreation, and wireless service in the park is problematic because of slow action by Federal authorities in fulfilling siting requests. In letter of December 2, 1997 from the United States Park Police to the National Park Service Regional Director, the Park Police States: "We have been long concerned about the inability to transmit cellularly in the Rock Creek Valley, and are relived at the prospect of closing this gap in our emergency communications network... In the event of a catastrophic incident requiring multi-agency coordination, cellular communication is imperative."[19] I think that the Park Police make the best case for 9-1-1 improvements including accelerated siting of wireless facilities on Federal lands when they state later in the same letter "In the age of rapidly expanding technology and increasing responsibilities, we must keep pace. We would be hard pressed to explain why we have not done so if an emergency occurred in the Rock Creek Valley."

The Age of the Smart Car: Wireless Enables Automatic Crash Notification

Vehicles today are equipped with advanced electronics, sensors and computer systems that can determine engine problems, temperature changes, and speed levels. Safety features have made cars safer and the impact of crashes less severe for passengers. Many drivers have car phones to report crashes, aggressive or drunk drivers, making other drivers safer on the roads. Currently, these car sensors are not connected to car wireless phones. And, 80% of wireless consumers now buy portable phones, not phones that are built into the car. For those who do not have car phones, there should be a "universal port" and cradle developed so that they can plug their portable phones (with their own adapters) into the car and connect the wireless phones to the crash sensors installed in the cars. The automobile industry is already working together to develop a technical solution for this need. A universal port and cradle would also offer convenience and safety, allowing hands-free use of portable phones, (particularly when voice activation technology becomes common). If the car crashes, the sensors would then trigger the phone, hooked up to the port, dial E9111 and transmit the data from the sensors to the appropriate emergency personnel, and open a voice channel so personnel can talk to the victims. CTIA has already developed a technical standard for a universal port, and other technologies to deploy an automatic crash notification system are already available. The process of testing automatic crash notification systems will be accelerated if pilot testing of these systems is part of a comprehensive national 9-1-1 program.

Good Samaritans Should Be Treated Uniformly Under Law in all Parts of the Nation

Addressing the issue of indemnity is an important prerequisite for deployment of a national 9-1-1 policy. Some states such as Connecticut, Florida, Georgia, Illinois, Louisiana and Virginia expressly provide immunity for wireless carriers and other enhanced service providers. Other states such as California, Hawaii, Mississippi and New York have statutes that embrace the immunity concept for emergency service

[19] Letter from US Park Police to the Regional Director, US Park Service, dated December 2, 1997.

providers, but the express terms or statutory language needs clarification or updating to cover wireless and other providers. Delaware makes enhanced 9-1-1 service providers liable to claims, with damages being capped or limited.

It is important to address the question of indemnity to ensure that good Samaritans are not faced with different legal treatment in different states. A federal solution should provide the same liability protection to wireless as wireline providers now enjoy. Similarly, users of wireless 9-1-1 should enjoy the same immunity under the law as the users of wireline 9-1-1 enjoy.

Conclusion

Every day, more than 83,000 wireless calls go to 9-1-1 or other emergency service numbers. As impressive as this statistic may sound, our nation's emergency communications could be much improved with the establishment of a uniform national 9-1-1 policy. Although the numbers 9-1-1 are reserved for emergency calling, they are not used uniformly for this purpose. Between 27 million and 40 million Americans do not have access to 9-1-1 service, wireline or wireless. Half of the geographical area of the United States is not covered by 9-1-1, and of the half that is covered, varying numbers are used in individual states.

Fewer than 50% of the American people know the telephone numbers of the police, fire and emergency medical service providers in their own communities, let alone the numbers of public safety agencies in communities they pass through when they travel across America. This lack of information threatens the safety of millions of people. The wireless telecommunications industry, public safety officials, and health care personnel have come together to pursue enactment of legislation to set a uniform national emergency system policy that will coordinate efforts to utilize wireless technology to save lives.

Thousands of lives could be saved each year with faster access to emergency services through 9-1-1. By connecting the dots with technology that already exists, we can accelerate the response time to emergencies. There are several key elements important in any national policy to improve emergency medical services:

- Designate 9-1-1 as the universal emergency telephone number in the U.S.
- Provide for grants to States by the National Highway Traffic Safety Administrator (NHTSA) to help local communities defray the expense of 9-1-1 improvements.
- Encourage state coordination of PSAP plans to improve continuity of service and sharing of information among EMS, PSAPs, carriers and state officials.
- Provide for investments in research and development of wireless automatic crash notification systems and a uniform wireless telephone interface for motor vehicles.
- Require Federal agencies to make their real property available promptly for siting of wireless facilities, unless doing so presents an unavoidable direct conflict with the agency's mission or the current or planned use of the property. A portion of the revenue from these leases should be earmarked for state and local 9-1-1 improvements.
- Enactment of Good Samaritan laws for wireless providers and users—the same protection from liability as in the wireline 9-1-1 system.

Today we have many tools—"intelligent" cars, the most advanced medical treatment system, over 50 million wireless subscribers, thousands of 911 dispatch centers, and the most advanced wireless telecommunications technology—yet there is no system effectively linking them together to respond to crashes or other emergencies. Instead we rely on passing motorists, highway patrols, or Good Samaritans to report accidents. What information we get is speculative, repetitive and not a reliable source to judge the kind of emergency care needed. Valuable time, within the "Golden Hour" of the emergency's occurrence, can tick away and decrease the victim's chances for life saving treatment. A public policy initiative that links the technologies saves thousands of lives each year and dramatically reduces the impact and cost of serious injuries.

With a national 9-1-1 plan in place, we can take full advantage of high-tech wireless and medical technology right now to save lives.

Mr. TAUZIN. Thank you very much, Mr. Wheeler. Let me take it from there I guess, gentlemen, the challenge of Mr. Wheeler propounds is that there's a time problem, that eventually mayors are going to look to moratoriums, eventually there will be model zoning ordinances passed and towers will be sited on private land.

There's a time opportunity to use the Federal properties to deploy some of these systems and obviously taking advantage of it

will not only get the systems deployed faster but will also produce the revenues which then can be turned into making sure the technologies are properly deployed.

Your comments please, Mr. Galvin first.

Mr. GALVIN. Well, as I say, our guidelines are in the Federal Register right now and are available for public comment. They do have a 60-day period within which, and that is a suggestion if the industry suggests something else, we'll certainly consider it, but the way it is written now is the Superintendent will make a determination and advise the applicant in writing and prior to expiration of the 60-day period that the requested use is approved, approved with changes, or denied, or will require further evaluation, so that the 60-day period is the time period.

Now I would say again that we have not been, in the National Park System, inundated with applications on a nationwide basis. We have 12 on a nationwide basis, and some of those are in——

Mr. TAUZIN. Well, let me ask Mr Wheeler. He has indicated that there's a 60-day provision now. I understand there's wiggle room. You can simply say, "We're considering it," but what of the fact there's been only 12 applications?

Mr. WHEELER. Well, there are a couple of things here. And his 60-day provision is a good provision. The comments on that have now been extended until May 1, 1998, which is now almost 3 years from the President's Order. So we don't want to confuse process and progress.

There's been a lot of time spent on what is the process to determine what the process is to determine whether you can site. And in this particular instance we're talking about almost 3 years. Let's look at the experience here.

Mr. TAUZIN. Would you comment on his fact that there have been 12 applications?

Mr. WHEELER. Yes, because in several—let me comment in two parts: No. 1, there is appended to my testimony a copy from the Superintendent of the Blue Ridge Parkway in which he was writing to the jurisdictions surrounding the Parkway, quoting the Telecommunications Act that this committee passed as saying that we have recently completed the task and are contacting the counties to enlist support for discouraging the siting of towers.

We have then a document that the Department of Interior National Park Service put out, NPS position. This is also appended to my testimony, and I quote, "Cellular towers are visually intrusive and nonconforming. This use serves a private and profit-driven interest that is not compatible with the mission and goals of the Service. They are to be discouraged in National Parks, on lands where visual quality, visitor safety and resource protection are preeminent."

Mr. TAUZIN. So your point is that applications are not being made being they are being discouraged——

Mr. WHEELER. It is really simple. You know, once after—after the girl quit saying no to me about going to the dance on Friday night, I, you know, after a couple of times I quit asking.

Mr. TAUZIN. Would you reply to that? Is the Park Service actively discouraging the application of use of Park properties?

Mr. GALVIN. Well, I would—no, I'd say the answer to that is no. All of these applications, these sort of industrial applications; and incidentally the forms we use, the procedures we use, aren't any different than we would use if we have a right-of-way. The Blue Ridge Parkway is a good example. Think about the Blue Ridge Parkway. It's 460 miles long. A lot of power lines cross it. A lot of gas lines cross it. So this is a process we deal with all the time.

We do not consider those Park uses in a sense, and we don't encourage them, but we recognize as a practical matter that we've got to deal with them, and I think the wireless technology is the same thing.

Mr. TAUZIN. Mr. Bibb, I want you to get in this too, but obviously I sense something here that we've also heard testimony about before and heard conversations from folks who visited us in our offices, and that is the aesthetics of a tower somehow will offend a public Park so we're stuck with the notion that Rock Creek Parkway still hasn't resolved the dead zone problems.

Is that a problem? Can we overcome that?

Mr. GALVIN. Sure. We're concerned about aesthetics, but being concerned about aesthetics is not saying you can't put a tower someplace. We've got towers——

Mr. TAUZIN. Well he's quoting statements from Park officials saying we discourage it. Is that correct?

Mr. GALVIN. Right. Right. We are concerned about aesthetics. Absolutely. We don't want a tower on top of Independence Hall, and we don't want a tower on Lincoln Memorial. That's obvious. That's not to say you can't put towers someplaces in Parks, and with respect to Rock Creek, we haven't said you can put a tower in Rock Creek.

We have no applications in Rock Creek. We have four providers who have contacted us about the possibility of putting one in.

Mr. TAUZIN. You are negotiating right now, aren't you, with some providers?

Mr. GALVIN. Yes. Absolutely.

Mr. TAUZIN. I understand that. I've got a note that Bell Atlantic Mobile is negotiating with you right now, and three other providers as well?

Mr. GALVIN. Yes. Right.

Mr. TAUZIN. What are the other three?

Mr. GALVIN. Now we have been contacted by four.

Mr. TAUZIN. The reason I call on Rock Creek Park, Tom, is it's like the Chesapeake. It gets a lot of attention because it's right here, close to the Nation's Capital.

Mr. GALVIN. It's a good example.

Mr. TAUZIN. It's a heck of a problem here. Here's a park right in the middle of the Nation's Capital where we've got a dead zone. You got four applications for service?

Mr. GALVIN. No, we don't have any applications. We are talking to four providers.

Mr. TAUZIN. You've got four negotiations going on.

Mr. GALVIN. Right.

Mr. TAUZIN. How are those negotiations going? You know, Mr. Wheeler points out, you know, that we've got an act passed in

1996, a directive since 1995. Why don't we have negotiations concluded by now?

Mr. GALVIN. Well I think you'll have to ask the providers as well as the Park Service that question. I mean we—these providers—Bell Atlantic, Nynex Mobile, Extel and Cellular One—have contacted us. They haven't even said they want to put a tower in the Park.

Mr. TAUZIN. Are you discouraging the location of towers in Rock Creek as these other directors seem to be?

Mr. GALVIN. No, we are not.

Mr. TAUZIN. Tom, jump in here. You had——

Mr. WHEELER. Mr. Chairman, I personally visited with the Director of the Park Service about Rock Creek about 18 month ago with the President of Bell Atlantic Mobile, but let me tell you another story that came out which is fascinating.

We hear a lot about Rock Creek, but let's talk about the 14th Street Bridge. It is an incredibly congested area. You know you can't get a telephone, get a wireless signal, many times at National Airport because all the circuits are jammed up.

So Bell Atlantic, knowing they were going to have a hard time siting on Park Service land, went to the railroad at the foot of the 14th Street Bridge and arranged for a lease from them to put an antenna at that site and provide service. The problem is to get from that antenna across to tie into the existing telecommunications facility, you had to cross eight feet of National Park Service land, eight feet, and the Park Service did not allow that to happen even though Bell Atlantic said they would do it underground and would totally landscape it afterwards. The answer is no.

Now this is not—and unfortunately there are more like this. This is—let's go to Yosemite National Park where the Park Service said, "Well, we have one wireless provider in the Park. That's all we need."

The Congress of the United States has said we want to encourage competition. Yosemite Park says, "No. We know better than the Congress of the United States."

These stories again and again and again hitting you in the face begin to send a message and all I am saying is that there is great opportunity here to change that and to work together, and to then use those funds to go out and build that 21st century safety net you were talking about.

Mr. TAUZIN. David, I am going to give you a shot.

Mr. BIBB. Thank you, Mr. Chairman. I am hearing several anecdotes here, but I'd like to give you the latest numbers I have. In the 6 months after we conducted the forums with CTIA and with the Federal agencies, the Federal agencies have reported to us 340 antenna siting requests. They rejected 10; 2.9 percent. I don't think that is time after time after time.

I do think—I do agree with Mr. Wheeler there's an opportunity here. But let me make a couple of other points. GSA well recognizes that time is money. Less than 2 months after the Telecommunications Act we had our bulletin out. There was another bulletin in 1997 to reinforce the importance of the program, but we were out in 2 months, less than 2 months, with a bulletin.

The 60-day guideline which we put out was a joint effort with the Joint Working Group between the cellular associations and the agencies as a reasonable time to give a yes, a no, or in some cases, there may be environmental protection or historic preservation issues so we can't tell you yes or no, but we are going to pursue it. These delays do enter into the experience in some cases.

In the case of GSA I mentioned the importance of incentives to the agencies, and I would be very careful about diverting all of those funds to another use. Granted there needs to be funding for E9-1-1, but the agencies that are performing the best are those that can retain the proceeds from the outleases.

GSA typically can get an answer back and a lease made in under a month and is doing that today. I would reiterate with all due respect as to the dollar volume that can be generated, I don't believe it's billions. I think the Federal Government owns a very low number of properties in the most expensive areas, the urban areas.

In Washington, DC, we have a fairly wide net of Federal properties. We have fulfilled every request we've had, and we're generating less than a million dollars here. So I have a very hard time extrapolating that to over a billion dollars in nationwide income.

Mr. TAUZIN. Obviously we are going to want to look at those numbers, Mr. Wheeler, and examine which of you is more accurate here, but we recognize there is a dispute over how much money might be realized.

One final thought, and before you Mr. Shimkus, I am told, Mr. Galvin, that one of the problems in terms of Rock Creek Park and other Park facilities is that the providers of service need to be able to get in and do preliminary work to put together an application. They have to do some—apparent—I suppose some sort of engineering survey or something to see exactly what has to be done if you are going to deploy a system through an area like Rock Creek Parkway.

And that's where the Service has been reluctant to allow the carriers to come in and get the authority to do that, is that correct or is that——

Mr. GALVIN. I don't know it to be correct. I mean most of these Parks are mostly public property, and they're mostly wide open to the public. I mean unless there's——

Mr. TAUZIN. But don't you need a permit to go in and do any engineering type surveys in the Park?

Mr. GALVIN. It kind of depends on what you do. If you are going to disturb earth or something like that, yes, but otherwise, you know, I mean these are——

Mr. TAUZIN. Well, you get the——

Mr. GALVIN. For instance, to drive through the Park and see where you've got coverage or not, we've done that ourselves. I mean that's—at Rock Creek for instance.

Mr. TAUZIN. The Chair will recognize the gentleman from Massachusetts for a round of questions.

Mr. MARKEY. And what is your—what do your people find when they drive through Rock Creek Parkway?

Mr. GALVIN. Generally at the upper end of Rock Creek Park there is not coverage. At the lower end there is.

Mr. MARKEY. Uh-huh. That's what I find too when I drive in each day.

Mr. GALVIN. Okay, now you are going to tell me to pave the place, right?

Mr. MARKEY. My staff thinks I am mad at them, you know. You know, you should pave every day——

Mr. GALVIN. You don't want it paved, too, do you? You want new roadwork too? I know a lot of you guys come in on Rock Creek Parkway.

Mr. MARKEY. You just need a—some tower, some way of advancing the communications——

Mr. GALVIN. Yes, we are working on that.

Mr. MARKEY. And how much time do you think it will take in Rock Creek Parkway?

Mr. GALVIN. Well, we are talking to four providers right now. I mean, as I said to the chairman, I think part of that answer is with the providers. We don't have an application at Rock Creek Parkway.

Mr. WHEELER. But we are splitting hairs here, with all due respect. The question of application——

Mr. GALVIN. You don't have to give me your due respect.

Mr. WHEELER. No. I mean, you know, I appreciate what you all have been trying to do in the process point of view, but it is—it was stated very well on the previous panel that that is not moving with a dispatch that is realistic in so far as a competitive market is concerned.

Let's go back to the—what are the carriers trying to do in Rock Creek Park? I mean I've seen the schematics. They're hanging them on the lights at the tennis stadium, is one place that the wireless antenna is going to go. How big a deal can it be to put an antenna on a light pole that's already hanging up there?

Mr. GALVIN. It may not be a big deal. When we get their application we'll take a look at it.

Mr. WHEELER. But we've been talking about it for a couple of years now.

Mr. MARKEY. You're saying there is no application?

Mr. GALVIN. There are no applications.

Mr. MARKEY. There are none.

Mr. GALVIN. There are none.

Mr. MARKEY. We're talking about Rock Creek Parkway now?

Mr. GALVIN. Rock Creek Parkway.

Mr. MARKEY. So there are no applications?

Mr. WHEELER. What I am saying, Mr. Markey, is that there—we're splitting hairs on the lack of applications. It's like the fact there hasn't been a bill introduced here, but look at what we are talking about. We're really serious about the discussion.

Mr. MARKEY. Do you know what we should do, Mr. Wheeler? We should call the four companies, have them send over an application tomorrow, okay, then we can call Mr. Galvin next week and ask him how are they doing on the applications since it's not that complicated.

Mr. TAUZIN. Don't use your cell phone if you're in Rock Creek Park for calling.

Mr. MARKEY. Why don't we just do that? I mean that would solve it. Mr. Galvin says it's no problem, that they would be more than willing to move expeditiously on any application which they have, and we know it's not that complicated a process, and then we can just again begin to follow up very quickly on it.

So he's got a legitimate point. If there are no applications, and you contend that you have a legitimate point because in other analogous situations they're not moving as expeditiously as they should.

Mr. WHEELER. Or here. I mean these are not—these discussions have been going on for a couple of years.

Mr. MARKEY. So if the obstacle though is a formal application—I don't know how hard it is to fill out an application—I bet you it's not that hard—and——

Mr. WHEELER. Mr. Markey, there's a problem. Their rules for considering the application will not be not be closed receiving comments until May of this year.

Mr. GALVIN. That's true, but we have considered applications and put facilities in Parks absent these guidelines. There are other guidelines——

Mr. WHEELER. So how do you make an application if there are no rules——

Mr. MARKEY. Since it's my own personal experience, and I'll have to follow it each day as I lose contact, and so I'll know whether or not and how fast it's moving. Why don't we do this? Why don't we have them all apply immediately, okay, similar to Mr. Galvin's invitation and then we can begin using this as a microcosmic example, okay, of what the process is to see how long it takes, you know, with our subcommittee overseeing this process now, okay, for them to go through a process which could then be a model for other public land areas.

Mr. TAUZIN. I think he's putting you between a Rock Creek and a hard place here.

Mr. GALVIN. Mr. Markey's done that to me before.

Mr. MARKEY. And he successfully avoided being on the spot too. He's very good at it, which is why I have to put it in these terms; I understand Mr. Galvin's approach to life.

Mr. GALVIN. Not life. Not life.

Mr. MARKEY. Well, me.

So, but I think this is a very legitimate subject for discussion that we would be able to monitor as a subcommittee and use as our example. So let's do it if you could next week and or by the end of this week, and then we'll begin the discussion. And every day that I ride in and I get disconnected I can come into to see the chairman here and tell him, as I am calling him——

Well, let me ask you this, Mr. Galvin: If they apply within the next week, how long do you think it would take to get something approved?

Mr. GALVIN. Less than 60 days.

Mr. MARKEY. Less than 60 days. Okay. You've got a—the starter's gun has gone off, and if we can accomplish that goal——

Mr. WHEELER. Can I—can we also expand that beyond Rock Creek?

Mr. MARKEY. Oh yes, beyond that, but I am saying for this purpose, okay.

Mr. WHEELER. That we'll have a microcosm test, but the point of the matter is that we've now been 3 years through this whole——

Mr. TAUZIN. Well, there's another point. If the gentlemen yield, I mean Mr. Markey is not going to ride through every park in America. He is coming to work in the morning. He is not going to ride through Louisiana on his way to the Nation's Capital every day or through Montana or through any other area in the United States.

This may be a false test is what I am saying. You may indeed do this to satisfy this hearing and Mr. Markey and please me because he won't be bothering me every day, but in the end we still have the problem of deploying towers across America and the opportunities, Mr. Wheeler has spoken of in terms getting the Federal revenues from those deployments and getting the services out that might save lives in the meantime.

And if the gentleman will continue to yield, I just want to point out that everything I know about tower siting is that overcoming aesthetic concerns, designing towers so that they are not very obvious, so that they blend into a background so that they even look like trees I understand, is not a difficult task anymore. It's not rocket science, and if the Park Service wants to make that requirement upon the providers, that the towers be invisible, almost to the point where people do not notice them, I think those things can and do occur now. We ought to encourage this with public buildings.

Mr. BIBB. Mr. Chairman, I think you could ride around Washington looking for antennas and not find them. They are on Federal buildings all over town.

Mr. TAUZIN. I did that. I rode 1 day around the beltway with my chief counsel, who pointed out towers to me that I didn't know existed, only because he knew they were there, and I didn't know they were there, and didn't know they were towers even.

Mr. BIBB. Take the tower of the Old Post Office on Pennsylvania Avenue.

Mr. TAUZIN. Yes, that's a good example. And the point I'm making on the gentleman's time was—and I'll give him more time—is that it seems to me that the Park Service could cut through a lot of this chaff and just simply give some clear directives to the applicants as to how to apply across America, how to design their systems so they don't offend people in the parks and the parkways of our country, and somehow achieve the twin results of realizing revenue while the Service can, while the GSA can, and turn that revenue to the useful purposes that Sue and others talked about in terms of saving American lives in the process. There's an awful lot of win/win here for all of us, if we simply work together.

I thank the gentleman for yielding.

Mr. MARKEY. I agree with the gentleman. And, again, I'm of the opinion that if we set up a procedure with Mr. Galvin, that we'll be able to accomplish it, and I think that—I'm not saying that, for my purposes, just doing Rock Creek Parkway is the end of it. It's

the beginning of it. It's a good way for all of us having a situation which we can all understand.

In one of my communities, the wealthiest community in New England, they've just reached a compromise in the middle of this town. They clearly don't want any towers in town. Well, they're going to use the old weather vanes for the antennae, and no one in town realized this, that they had actually just used that very old site, the weather vanes in the highest site in town; it's imperceptibly now altered to include an antennae, and the aesthetics committee of this whole Republican Yankee town are quite happy, as other people who use cell phones. It's a perfectly fine accommodation.

We do the same thing out here on the floor of Congress. Clearly, the Daughters of the American Revolution didn't want the chamber altered, and so we've got this compromise, where we beam up our names and we turn the walls into a tot-board like at a dog track for about 15 minutes, and then when it's done, we go back to 1858 again. It's a perfect compromise that technology and history accommodated And it seems that we can do the same thing in community after community across our country, not denying this technological revolution, but accommodating it to history, to nature, and moving forward. And I think that we've got the makings of a perfect situation I think that could come out of this hearing.

Yes?

Mr. WHEELER. An interesting thing happened apropos what you're just saying yesterday in the State of New York, and it has an impact on the kind of thing that the first panel was talking about. That is, the State of New York yesterday announced the plan to facilitate the siting on New York State properties. Maryland has done that for the State of Maryland properties. The difficulty is that the Federal Government is about to lose in the horse race, and by losing, will have passed on an incredible opportunity for these potentially billions of dollars over the years to fund—I said, "over the years"——

Mr. TAUZIN. I heard.

Mr. WHEELER. [continuing] to fund the kind of activities we were talking about before. So there is a competitive issue here.

Mr. MARKEY. I thank you, Mr. Chairman, for allowing me the luxury of those extra minutes.

Mr. TAUZIN. Thank you, Mr. Markey, and I'll guess we'll rap again. But let me urge those of you who manage our Federal properties to think through. I mean Mr. Wheeler, if you would do us the kind favor of not only making sure that we have copies of these admonitions to discourage the siting, but also to make sure that the Park Service is aware that some of their managers are doing this in localities.

I mean that certainly should not occur. I mean there should be some recognition that when the President gave an order in 1995 that ought to be carried out.

Mr. GALVIN. Well, with due respect to Mr. Wheeler, I am thoroughly aware of the Blue Ridge Parkway memo, and he excerpted quotes from it. The intent of that memo I think was entirely in line, and that is to remind the companies that they've got the responsibility to do some environmental compliance in siting those

towers and in fact that he wanted a place at the table when those towers were discussed.

It might be better in some instances down there——

Mr. TAUZIN. It sounds like a just say no policy though.

Mr. GALVIN. No, it doesn't really.

Mr. TAUZIN. It read that way, and if that's not what it is—I hope it isn't. All I am saying is that you got a directive, and it shouldn't take 3 years to begin carrying it out, and if we can do it within 60 days in Rock Creek we ought to be doing it within 60 days across America where we have applications——

Mr. GALVIN. We've been doing it right along. I mean nobody's been stalling here for the absence of guidelines. We've had other guidelines in place.

Mr. TAUZIN. Well all I am suggesting is that everything we heard in this first panel tells me that all of us have to be engaged in an effort to expedite the deployment of these services for the sake of American lives.

And second, to the extent that the Federal Government has an interest in this, not to mobilize the properties we have available to us in ways that clearly address environmental and aesthetic and other concerns—I mean nobody is asking you not to do that—but in ways to do that—for us not to do that would be irresponsible I think, and so I would hope that when we get back together at a future hearing that there's a lot more harmony at the table and that there's some general agreement that things are progressing a lot better than perhaps you seem to indicate today, Mr. Wheeler.

Again, no one is asking our land managers to make bad decisions. We are simply asking you to move the decision process along so that good decisions are made in terms of siting that makes sense, both for the aesthetics and environmental concerns of a Park or a building, a community, but also for the sake of getting these things deployed.

I want to end on this last note. The first panel pointed out that there's some dollar concerns. I don't know whether it's big and some millions either. I've heard numbers batted around that I don't know are accurate either.

All I know is that there are dollars out there, and that at a time we're all scrapping for dollars to make sure the mayors and the communities open up their moratoria and literally provide these services for their citizens that we ought not miss the opportunity if they are available in an environmentally aesthetically sensitive way on public buildings and public lands and so I would again encourage you to move that process along to the extent you can.

Mr. Wheeler, if you want to wrap.

Mr. WHEELER. Can I just throw an idea out here at the end, picking up on what you just said about maybe there's more unanimity than we think at this table. That is—as I've been trying to say, these gentlemen I think in terms of process have made valiant efforts.

What if the National Park Service guidelines of 60 days response were to end up being national policy for all Federal agencies and those funds so generated—whether it's $2 million, $200 million or $2 billion, whatever, it's more than today—were directed toward

the kind of safety enhancement activities that we were seeing today.

Let's take and embrace what he says he is now about ready to do, let's move on that, apply it to everybody and then use that——

Mr. TAUZIN. Well, with Mr. Bibb's admonition, I am going to make it for you, David, that the managers be allowed to retain that which is necessary to manage the program and be incentivized to carry it forward. I think he's made a good point that you can't deprive them of all the resources and have them left with the burden of managing sites without having some reward for having done that.

So maybe there is some balance.

Mr. BIBB. I would add to that Mr. Chairman. There are some agencies, again to make the point, that can retain the full proceeds today. Those are the agencies where you see people with a very entrepreneurial spirit, really going after it, because that money goes back into the funds that renovate their buildings——

Mr. TAUZIN. So what you are saying is that there is an incentive element there that we can't ignore either.

Mr. BIBB. Absolutely.

Mr. TAUZIN. And that's the point I was trying to make.

Mr. BIBB. And the 60 days is national policy already.

Mr. TAUZIN. I got it. Mr. Shimkus, have you any final thoughts or comments, sir? Mr. Markey? Then it's with my thanks that I dismiss this panel with again the requests that we are going to visit this again as we try to make some good policy in this area. And we've learned a lot today, but I would encourage between now and the next time we visit to have this Rock Creek Parkway issue settled.

Mr. GALVIN. Make sure Mr. Markey can hear his phone all the way down Rock Creek Park.

Mr. TAUZIN. So we can hear him all the way when he calls his office.

Mr. MARKEY. The next hearing is in 60 days by the way.

Mr. TAUZIN. The hearing stands adjourned. My thanks.

[Whereupon, at 5:10 p.m., the committee adjourned subject to the call of the Chair.]

[Additional material submitted for the record follows:]

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
MARCH 23, 1998

Honorable W.J. (BILLY) TAUZIN
Chairman, Subcommittee on Telecommunications,
Trade and Consumer Protection
U.S. House of Representatives
2183 Rayburn Building
Washington, D.C. 20515

DEAR MR. CHAIRMAN: As you know, I introduced H.R. 2901 last fall with two members of your Subcommittee, Congressman Klug and Congresswoman Eshoo, as cosponsors. I know that you recognize the important role that wireless telephone service can play in promoting public safety and commend you and the subcommittee for holding hearings on enhanced wireless 911 services. I am writing today to ask that you consider helping me to rectify a problem for several rural areas which do not presently have the benefit of competing cellular licensees.

Most rural areas of this country have two cellular licensees competing to provide quality service over their respective service territories. Competition between two licensees not only improves service for businesses, governments, and private users,

but also enhances emergency response to situations such as automobile accidents, individuals marooned by bad weather, and missing hikers.

Unfortunately, part of my Congressional District has not enjoyed the benefits of competition between two cellular licensees. Only one cellular licensee serves three largely rural counties northwest of Scranton, and its coverage is spotty in some areas because of the hilly topography. A second licensee competing for business could significantly improve cellular emergency service in these three counties.

To address this problem, H.R. 2901 would direct the Federal Communications Commission to allow a company previously denied a license to serve the three Pennsylvania counties to resubmit its application consistent with FCC rules and procedures. In 1988, the FCC denied the license because the original application did not comply with the FCC's "letter perfect" rule under foreign ownership restrictions of the Communications Act of 1934. Significantly, the FCC had allowed other similarly-situated companies to correct their applications. In addition, Congress repealed these foreign-ownership restrictions in the Telecommunications Act of 1996.

To protect the public, H.R. 2901 provides that any license granted under the legislation would be subject to a three-year restriction. In addition, if the licensee does not comply with FCC service the license would be subject to auction.

H.R. 2901 also addresses two other rural service areas, one in Minnesota and one in Florida. In each of those two areas, the FCC has awarded a temporary licenses. Since these licenses can be taken away at any time, the temporary licensees lack the incentive to provide the topnotch service of permanent licensees. H.R. 2901 would direct the FCC to allow the two companies previously denied licenses because of violations of the letter perfect foreign-ownership rule to resubmit their applications, the Minnesota and Florida licensees would be subject to the same public-interest requirements as the Pennsylvania licensee.

I hope this Subcommittee will approve H.R. 2901 during its consideration of telecommunications legislation this year.

Thank you for your kind consideration.

Sincerely,

JOSEPH M. MCDADE
Member of Congress

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