Statement of Peter A. Modafferi

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HEARING ON THE ELECTRONIC COMMUNICATIONS PRIVACY ACT (ECPA) PART 2: GEOLOCATION PRIVACY AND SURVEILLANCE

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Introduction

Good Morning Chairman Sensenbrenner, Ranking Member Scott, and distinguished members of the subcommittee. Thank you for this opportunity to speak to you this morning to discuss geolocation information, the role that information plays as evidence in criminal investigations, and its importance in law enforcement's effort to seek justice and public safety in the 21st century.

My name is Peter A. Modafferi and I am the Chief of Detectives of the Rockland County, New York District Attorney's Office. I also Chair the Police Investigative Operations Committee of the International Association of Chiefs of Police and I have worked on a number of boards, working groups and committees concerned with issues related to criminal investigations.

I have been a detective for 41 years. For many years I conducted investigations into all types of criminal activity and I now lead, direct and coordinate these investigations. Today I wish to share with you what I have learned about investigations both from my experiences in Rockland County and from the exposure to the field which I have gained through various committees and working groups.

It is from this vantage point that I have seen the great potential that lies in law enforcement's utilization of the innovations in geolocation information. Utilizing this information in the early stages of an investigation often provides fundamental building blocks on which cases may rest. Requiring probable cause in the initial stage of an investigation to gain access to geolocation information would make it significantly more difficult to solve crimes.

It is my observation that, today, there is a digital evidence aspect to nearly every crime scene. Increasingly, those scenes are filled with digital evidence and, inevitably, to fully benefit from that evidence we must gather geolocation information. Some of this valuable evidence that is crucial in generating leads and ruling out suspects is in jeopardy if we are held to a probable cause standard to access every aspect of geolocation data.

There are issues of time, technology and process that must be addressed in such a manner that will allow us to proceed with an investigation from its initial stages, where little is known and nothing can be assumed, to a point where we go in the direction of establishing probable cause. From this point, we will hopefully proceed to an arrest that will withstand the rigors of due process and the judicial system and lead with 100% accuracy to a conviction beyond a reasonable doubt.

My Perspective

Crime is and always will be one of the most serious issues confronted by civilization.

Today's communications systems, worldwide information services, massive participation in social media services and multi-national economic partnerships have dramatically impacted our society. It is to this "globalized" environment that law enforcement must adapt, culturally and technologically in order to address crime.

The Investigative Process

Why is geolocation information valuable to law enforcement?

In the initial stages of an investigation, law enforcement seeks to quickly develop leads and theories that incorporate answers to classic questions presented: Who, What, Where, When, Why and How. Geolocation evidence can inform the answer to each question. The unique value of geolocation information is found in its two components – an accurate location and an accurate time the location was determined.

When investigators start working a case, little may be known and nothing should be assumed. To know pertinent facts and make valid assumptions, investigators use available geolocation evidence as a filter. This process allows investigators to winnow out and prioritize leads from the unorganized mass of related and unrelated information that surrounds a crime and a crime scene.

This process is the beginning of the effort to assemble an offering of probable cause to believe that a certain person or persons committed the crime, and that particular evidence will be found in specific locations.

Through the lens of geolocation evidence, investigators press to correctly determine an answer to Who, When and Where - what witnesses, victims, knowledgeable persons and perpetrators – were in the vicinity of the crime at about the time it occurred.

How is geolocation evidence used in an investigation?

In addition to providing clarity by answering some or all of the initial questions presented, the time and place components of geolocation information can be of use to corroborate or refute statements and conclusions offered at any time during the investigation.

Geolocation information can be used to confirm or dismiss alibi statements that are offered to show that a subject was not present at the time and place the crime occurred, or to confirm or dismiss the claim of a witness or another knowledgeable person who was present at a certain time or place.

A location-enabled digital device can be a "witness" to a crime. In fact, in cases where a human witness does not exist or is not discovered, the stored contents of the device may

be the only initial "witness" available to investigators. In this case, the geolocation information components of time and place are of upmost importance.

Justice and Public Safety in the 21st Century

Evidence is the basic foundation for addressing crime and criminals. The investigative process is how we secure the evidence we need to protect society and attain justice and public safety in the 21st century. Today we are part of a digital world and in that world digital evidence abounds.

Geolocation evidence is essential to obtain in the early stages of investigations when probable cause has not been established. Requiring probable cause to get basic, limited information about a person's historical location would make it significantly more difficult to solve crimes and seek justice for victims.

We do not have the luxury of setting the pace at a crime scene or in conducting an investigation. If we are constrained by a process that slows our progress in pursuing justice by extending the timeline of an investigation, the digital evidence at a crime scene may well go unexplored, evidence not be seized and analyzed, and our investigation will not meet our needs or the expectations of victims or civilized society as a whole.

The court room and judicial process are the safety net for a free and just society. That wrongful convictions have occurred is tragic and everything must be done to avoid them in the future. The process starts at the crime scene or with knowledge that a crime may have been committed and proceeds ahead. In the end, the basic fact is that you cannot have a wrongful conviction without a wrongful arrest. A wrongful arrest is the result of an inadequate investigation.

We have found that wrongful arrests occur because what we thought was proof wasn't always concrete, and what we thought was science was not always definitive. Some of our investigations, based on flawed conclusions, were neither necessarily accurate nor conclusive.

Geolocation information offers tremendous factual data that can be used to remedy these failures. Geolocation information can confirm or refute identifications, confessions and inaccurate testimony.

Added to the issues raised through the examination of wrongful convictions is globalization. The "usual suspects" are not just from the "old neighborhood" anymore. Globalization has, in the words of Thomas Friedman "unleashed the energies of hundreds of millions of people"[1]. Unfortunately some of those people and their energies result in

[1] The World is Flat, Thomas Friedman, Farrar, Straus & Giroux, April 2005

crime. Criminal activity and the location of criminals is not restricted by the limits and boundaries of an earlier era. Many of those boundaries have evaporated. The only boundaries that now limit globalization are governmental, which for criminals are easy obstacles to overcome.

To learn from this and better ourselves we must take full advantage of all that is available in today's world. Processes, guidelines and standards must be developed that will allow law enforcement to gain from technological evolution and attain what Friedman refers to as "productivity impact." Utilizing all that can be found at a crime scene or directly from a device recovered through a crime scene will not simply result in an increase in arrests but also an increase in accuracy and effectiveness, which will lead to justice and public safety in the 21st century.

An investigation is a process. It starts with the basics of who, what, when and where which may lead to a suspect, facts, evidence and probable cause to believe a suspect committed the crime. Utilizing geolocation information will offer substantial facts which will assist in obtaining a conviction beyond a reasonable doubt.

Law enforcement in the 21st century must combine new technologies with new ways of doing business to maximize investigative potential, create productivity "breakthroughs" and bring criminals to justice. "Productivity impact" in law enforcement investigations can be achieved in part through effective use of geolocation information.

A recent investigation into a series of bank robberies in the tri state area around New York City offers a significant example of how geolocation information can help solve a case and avoid a possible wrongful conviction.

Two brothers, residents of New York City, had robbed seven banks in the suburbs outside of the city. Utilizing standard investigative methods, detectives developed a suspect. Bank employees however were not able to identify the individual because he wore a mask. As the investigation progressed, a teller from one of the banks that were robbed believed she had seen the defendant at a gas station and photographed the vehicle he was driving. However, none of the employees at the banks could identify the individual from the gas station as the robber.

Utilizing a range of legal process from a subpoena to a court order, detectives obtained basic geolocation information, which eventually led to development of probable cause and the placing of a GPS system on the vehicle. Once probable cause was established the suspect's location was monitored by tracking his cell phone.

The geolocation information obtained without a warrant at the beginning of the investigation when probable cause was not determined led to the arrest of two individuals immediately after a bank robbery. At the time of arrest they had the proceeds of the robbery in their possession.

As it turned out the original suspect was not the individual who entered the banks during the robberies. He was a cousin. If not for the teller seeing one of the brothers and photographing the vehicle he has just purchased (it had dealer license plates at that time) the actual robbers would not have been traced. Though similar in appearance, the man at the gas station was the person who entered the bank not the person the police were focusing on.

The right persons were arrested due to the effective use of geoloaction information at the early stages of the investigation when probable cause was not evident. Standard identification procedures were of no value.

Following The Digital Footprint

The essentials to ensure the effectiveness of law enforcement lie in establishing a basic foundation from which we can pursue investigations. Investigations don't start with probable cause; they *lead us* to probable cause. Through investigations we discover facts. From these facts we start to build our case, which will hopefully lead to building probable cause and a fact-filled evidentiary case that leads to guilt beyond a reasonable doubt.

What is a "digital footprint" and how can investigators benefit from it? The science and technology behind geolocation has opened a new world filled with data that can corroborate or refute human observations. Geolocation information is part of a person's "digital footprint."

Evidence garnered through geolocation information can be established through of all types of equipment and records. Phones, mobile devices, trackers, and preinstalled (OnStar) technology are available today with more specific technology evolving at a rapid pace. Also from this technology comes the historical data and business records from which location information can be derived – EZ Pass, Credit Card / Debit Transactions, etc.

To establish probable cause we need a reasonable, manageable balance between legal process and investigative responsiveness.

As an example, an anonymous tip was offered to the Rockland County Drug Task Force. The tip included the name of an individual and a phone number connected to that individual. The caller stated that this person was operating a clandestine laboratory manufacturing illegal drugs.

The person offering the information stated that the principals involved in this criminal conspiracy had met recently at the location of the laboratory. The caller also stated an approximate date and time of that meeting. As is often the case, the initial information available to the investigators could not be confirmed and the person offering the information wished to remain anonymous.

The first step in the investigation was to subpoena basic subscriber information and limited call detail records. These subpoenas were issued in an effort to further identify the user of the given phone number and to display incoming and outgoing calls to and from associate numbers. This was done in an attempt to propose that certain associate phone numbers pointed to other members of the group and to discern a communications pattern between the conspirators. Any other associate numbers were ignored.

The boundaries of the information sought were confined to the proposed date/time window suggested by the caller.

Once a group of apparently related associate phone calls was established at the date and time proposed, historical geolocation information associated with the interacting phone numbers was obtained. This stored historical geolocation information is created and retained by the service provider during the operation of the cellular phone system. The boundary of this information was limited to the narrowed date/time in hopes that it might suggest a possible location of the meeting and the laboratory.

The use of this geolocation information led to the possible location of the lab and this information combined with standard police surveillance procedures led to a search warrant for the lab based on probable cause. We would not have been able to establish probable cause without the geolocation information provided in response to the initial subpoenas.

The technologies and records that can lead to geolocation of a criminal or exoneration of an innocent party varies between situations where geolocation is already "turned on" and recorded, and geolocation that results form a real time effort to obtain geolocation information. We can subpoena previously obtained records data or, following proper legal process, we can "turn on" appropriate technology.

Conclusion

Very little, if any, construction begins with out a foundation. Geolocation information is an essential building block in "the construction" of a criminal investigation. Often it will prove to be the concrete that cements eyewitness identification and the crime scene together. Geolocation puts us in an area where evidence and possibly a criminal or fugitive can be found.

To gather up and cement these building blocks together in the initial stages of an investigation we must determine a reasonable, manageable balance between legal process and investigative responsiveness. (Note, an emergency situation initiates a different, more expeditious process). In a criminal investigation, or a public safety/security event, access to geolocational information and records is an essential requirement to the determination of true facts. Likewise, it is essential to receive these facts in a rapid and complete response from the holder of that information or record.

I have not attempted to address the science and techniques used to derive geolocation information because I am not a technologist. What I have addressed in my testimony are the needs, the logistics and the processes that relate to the use of technology that helps law enforcement make accurate, effective and efficient decisions in the course of an investigation. Requiring probable cause to get basic, limited information about a person's historical location would make it significantly more difficult to solve crimes and seek justice.

Thank you for your time and the opportunity to address this issue.