

**Before the
Committee on Oversight and Government Reform
of the
United States House of Representatives
Subcommittee on National Security and Foreign Affairs**

Testimony of Mr. Chet Huber, President, OnStar

Thank you Mr. Chairman and good morning. I am Chet Huber, President of OnStar, a wholly owned subsidiary of General Motors Corporation. I am currently a member of the NASA PNT Advisory Board and have served on the CDC's Advisory Committee on Injury Prevention and Control.

With nearly 6 million active subscribers, OnStar is the leading telematics service provider employing over 2,200 individuals in the U.S. and Canada.¹ OnStar is now standard on virtually all General Motors' retail vehicles and has developed a prominent national brand position.²

Our core safety, security and peace of mind services include Automatic Crash Response and emergency services which we deliver from three call centers in Pontiac, Michigan; Charlotte, North Carolina and Oshawa, Canada. Other services include Turn-by-Turn navigation, stolen vehicle location; and monthly OnStar Vehicle Diagnostic emails. We also offer one button, hands-free, prepaid wireless calling.

¹ Telematics is a growing market. There is currently one additional significant telematics service provider with between 500,000 and one million active subscribers and several automotive manufacturers have announced plans to begin to offer telematics services in the future.

² OnStar also provides service to a small number of vehicles from other manufacturers.

In a typical month, after call screening, we provide unique and critical support for public safety agencies in responding to:

- Over 2,000 Automatic Crash Notifications and
- Over 10,000 occupant initiated Emergency Button presses. These include heart attacks, strokes, and crashes not triggering an automatic call. Last November, OnStar marked its 100,000th Automatic Crash Response.

Monthly, we also pass on to public safety:

- Over 6,000 Good Samaritan calls for everything from crashes involving other vehicles, to roadway hazards - to possible Amber Alert sightings. And we assist with
- Over 500 stolen vehicle location requests including - on many new models- the ability to slow a stolen vehicle down to avoid a high speed pursuit.

Other monthly service statistics include delivery of:

- over 3.4 million diagnostic emails,
- nearly one million Turn-by-Turn routes and
- Over 53,000 remote door unlocks.

Delivering these services, and growing to our current scale, has required deep and fundamental technological innovation as we've uniquely integrated cellular, GPS and

voice recognition with extensive on-board and off-board software. This has required hundreds of millions of dollars of investments and resulted in the filing of over 500 patent applications with new filings at the rate of one every six days.

A critical element in our delivery of services is location. OnStar uses the civilian L1C/A signal to deliver our location-based services like Automatic Crash Response, stolen vehicle location assistance and Turn-by-Turn navigation. We also use directly or indirectly the GPS timing signal to enable other valuable services like remote door unlock and monthly diagnostic emails. An accurate, available and reliable GPS constellation is at the heart of our capability to provide these services.

We offer three recommendations for your consideration:

First, we must address the health of the current constellation. We are concerned that a recent report shows 8 of the current satellites are one component from total failure.³ Loss of signal will likely immediately affect GPS accuracy and availability (geographic coverage).

Second, as the GPS system is modernized, it is imperative that the U.S. government formally commit to preserving the L1C/A signal and to ensuring backward compatibility for legacy applications with no loss of performance from current levels.

³ GPS Operations CGSIC Brief (Sep 15 2008), Civil GPS Service Interface Committee Meeting. The Constellation Status Summary additionally indicated that of the currently 29-32 healthy satellites, 19 are past design life and 18 are one component away from partial failure.

Automotive applications of GPS, like OnStar, are embedded into the vehicle's electrical system and subjected to extensive validation testing. Because of this, it is impractical to retrofit GPS related hardware and assure the reliable delivery of services to subscribers. Therefore, for the benefit of our millions of customers - and others facing similar legacy issues - we are asking Congress and the Executive branch to work together to develop a policy that supports backward compatibility at current performance levels.⁴

Regarding performance, it is important to understand that the current GPS system is performing at a level well above the specified minimum standard and operators have used that performance to improve and enhance services.

Any modernization initiative that degrades backward compatible performance - such as reducing the number of satellites making up the constellation - would likely adversely impact the provision of services by OnStar, including the quality of location information we provide to public safety - thereby potentially increasing the response time of public safety personnel to crash victims and others in need of emergency services.

Our third recommendation – and this is also important to legacy applications - is that we commit to maintaining the current PRN code (or satellite signature structure) for the primary orbital slots - as satellites in those slots are replaced. Legacy hardware is not

⁴ In-vehicle screen based navigation systems are one example of applications that share similar legacy issues.

capable of being expanded to accommodate more than 32 slots so renumbering above 32 will likely affect performance of legacy applications.

In conclusion, Mr. Chairman, OnStar and GM support the continued modernization of the GPS system. A modern and robust GPS system is essential to OnStar's ability to deliver future services.

Modernization will create opportunities to address current issues like urban canyons and to add new capabilities. For example, modernization offers the potential to support lane level accuracy in automotive applications, opening the possibility of important new vehicle-to-vehicle safety-related applications that are in experimental development.

Additionally, strategies to support interchangeability with Galileo and other systems offer important opportunities to enhance performance.

But as we modernize, we must ensure backward compatibility at current performance levels for legacy applications like OnStar and thereby avoid significant disruptions in valuable services that carry important public safety benefits.

Thank you, Mr. Chairman. I look forward to your questions.