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1 {York Stenographic Services, Inc.}

2 HIF055.170

3 JOINT HEARING ON ``THE COLLECTION AND USE OF LOCATION

4 INFORMATION FOR COMMERCIAL PURPOSES''

5 WEDNESDAY, FEBRUARY 24, 2010

6 House of Representatives,

7 Subcommittee on Commerce, Trade, and Consumer Protection

8 joint with the

9 Subcommittee on Communications, Technology, and the Internet

10 Committee on Energy and Commerce

11 Washington, D.C.

12 The subcommittees met, pursuant to call, at 10:05 a.m.,

13 in Room 2141 of the Rayburn House Office Building, Hon. Bobby

14 L. Rush [Chairman of the Subcommittee on Commerce, Trade, and

15 Consumer Protection] presiding.

16 Present from Subcommittee on Commerce, Trade, and

17 Consumer Protection: Representatives Rush, Sarbanes, Barrow,

18 Matsui, Castor, Space, Braley, Stearns, Whitfield, Terry and

19 Scalise.

20 Present from Subcommittee on Communications, Technology
21 and the Internet: Representatives Boucher, Markey, Eshoo,
22 Doyle, Matsui, Castor, Space, Stearns, Shimkus, Buyer and
23 Terry.

24 Staff present: Michelle Ash, Chief Counsel; Marc
25 Groman, FTC Detailee; Greg Guice, FCC Detailee; Will Cusey,
26 Special Assistant; Daniel Hekier, Intern; Sarah Fisher,
27 Special Assistant; David Kohn, Press Secretary; Amy Levine,
28 Counsel; Timothy Robinson, Counsel; Ross Schulman, Intern;
29 Will Carty, Minority Professional Staff; Sam Costello,
30 Minority Legislative Analyst; Neil Fried, Minority Senior
31 Counsel; Shannon Weinberg, Minority Counsel; and Brian
32 McCullough, Minority Senior Professional Staff.

|

33 Mr. {Rush.} The subcommittee will now come to order.
34 We are conducting a hearing this morning on the matter of the
35 collection and use of location information for commercial
36 purposes, and I want to welcome all the members of the
37 committee who are present, those individuals who are present
38 who are non-members, and I also want to welcome all the
39 witnesses and those who are doing this from the perspective
40 of interested parties who are in the evidence. The chairman
41 recognizes himself for 5 minutes for the purposes of an
42 opening statement.

43 Today we are pleased to welcome six witnesses
44 representing the wireless industry, software firms, a
45 nonprofit advocacy group and an academic. We have got a lot
46 of expertise in the realm of privacy, and this joint hearing,
47 which is the fifth in our series of hearings on the general
48 topic of consumer privacy, will focus on the collection and
49 use of location information about individual consumers.
50 Local base applications and services are springing up each
51 day like wildfire. Yesterday there was Facebook and in the
52 not too distant future we will be encountering something more
53 akin to a placebook. Location-based services and the
54 applications that ride on these services utilize a number of
55 different tracking technologies which can make it easy to

56 track the whereabouts of an estimated 100 million individuals
57 around the world. By the year 2013, it is estimated that the
58 precise whereabouts of over 800 million individuals will be
59 readily discernible at any given moment in time. Of that
60 amount, nearly 180 million of these users will be North
61 Americans. Virtually all location-based services are
62 currently offered to subscribers for free and are subsidized
63 by advertisers. A majority of these services generate, emit
64 or connect terrestrial and satellite wireless signals. They
65 connect independently or at premapped points on a network.
66 These signals can then hone in on and find a wireless's
67 wireless, handheld or low-wave device such as a cell phone or
68 a GPS unit, and because these devices are typically always on
69 our bodies or within arm's reach, there is very little
70 guesswork for inquiring advertisers and other curious
71 subscribers to know or deduce where an individual is located
72 or where their daily movements are likely to be. In fact,
73 advertisers even know the identity of that individual with
74 the growing trend of behavioral advertising and how it
75 intersects with privacy considerations at our joint hearing
76 which our two committees held in June 2009.

77 To some extent, location-based services can be viewed as
78 a subcategory of behavioral tracking in that they can quickly
79 and cheaply, I might add, tell advertisers more than

80 contextual advertising ever could about someone's preference,
81 their habits and their patterns. Location-based services are
82 in actuality inherently more invasive and threatening to
83 consumer welfare and perhaps even more challenging to
84 consumer privacy than behavioral advertising. Tracking a
85 user's movements through a virtual world of business-to-
86 consumer websites is, I am sure everyone will agree, bad
87 enough. Location-based services on the other hand up the
88 ante by making an individual's real-world location data
89 accessible to intended and unintended recipients.

90 In closing, let me state clearly for the record, and
91 especially for those interested consumer groups, interested
92 entities and government regulators who have been monitoring
93 our series of hearings that with the information we will
94 obtain from today's hearing, we have now learned enough to
95 take the next major step. As one of two co-chairs of these
96 joint undertakings along with my friend, Congressman Boucher,
97 on privacy, it is my intent that our next hearing on privacy
98 will be a legislative hearing where we will discuss ``the
99 devil in the details'' by commenting on a discussion draft of
100 a comprehensive privacy bill. There is such a thing as TMI,
101 and we need to stop gathering information now and get
102 legislation on a privacy bill.

103 In the coming days, I and my staff will be working

104 closely with Mr. Boucher, Mr. Whitfield in Mr. Radanovich's
105 absence, Mr. Stearns and the minority staff to produce a
106 draft of a bill, and I would like to thank each of our
107 witnesses for your participation today and I look forward to
108 hearing your testimony and to vigorously engage in our
109 discussion today. I might again emphasize, I really
110 appreciate you taking the time out from your busy schedule to
111 be with us here today to add your voices and your values and
112 your expertise to this process.

113 [The prepared statement of Mr. Rush follows:]

114 ***** COMMITTEE INSERT *****

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115 Mr. {Rush.} We will now recognize now Mr. Whitfield for
116 5 minutes for the purposes of opening statement.

117 Mr. {Whitfield.} Mr. Chairman, thank you very much for
118 having this hearing on the collection and use of location
119 information for commercial purposes. We certainly appreciate
120 the panel for being here and giving us this expertise on this
121 important subject.

122 Through the use of technologies including GPS,
123 triangulation of cell phone positioning information or user-
124 entered data, consumers now have access to what I call
125 convenient information. Whether it is finding the nearest
126 local restaurant in an unfamiliar city, navigating cars to
127 intended designations or the knowledge that a first responder
128 can find us by our GPS location if we are ever in trouble,
129 many consumers find they can no longer live without these
130 apps, as they are called. This new technology raises
131 legitimate concerns about privacy. Obviously most people
132 know that the application they download specifically for its
133 location features will communicate that information for
134 application functionality. What isn't as clear is how the
135 data will be used, whether notice to the consumer is clear
136 and whether user controls over the personal data are
137 adequate. In addition to first-person privacy concerns,

138 there are also privacy concerns for second persons, the
139 people who may not use a service directly but who may be
140 touched by a service by virtue of someone else's use, just as
141 counterparties to phone calls or e-mails may find their
142 identity revealed without their consent. For example, if
143 someone forwards an e-mail to another person, so too can
144 one's privacy location information be revealed if the user of
145 the location-based social networking application shares that
146 information.

147 Similarly, special situations arise in the employer-
148 employee relationship. We can agree that there are benefits
149 to a delivery service improving its delivery efficiency by
150 using location tracking and positioning. The question is,
151 what rights do the employees have and what policy does the
152 employer communicate about its use of this technology. In
153 one example last August, a New York City employee was
154 terminated after the GPS on his city-provided phone revealed
155 that he had been at home before his shift ended on 83
156 occasions according to an article in the New York Post.
157 While this may have been justified, the fear of a Big Brother
158 surveillance environment has clearly arrived and merits a
159 serious discussion.

160 Another issue I might add that merits discussion
161 concerns uniformity, in my view. Wireless carriers are

162 generally prohibited from using location-based information
163 for commercial purposes. However, application providers are
164 not subject to this requirement. So I think that is an issue
165 we also need to be focused on.

166 There are many questions raised by these technologies
167 and how consumers interact with them. Most of these
168 beneficial services were developed in the absence of legal
169 mandates, and our top priority must be maintaining the
170 appropriate balance between an environment that does not
171 impede innovation but that does ensure consumers are fully
172 aware of the information they trade for the use of these
173 services. Thank you, Mr. Chairman.

174 [The prepared statement of Mr. Whitfield follows:]

175 ***** COMMITTEE INSERT *****

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176 Mr. {Rush.} The Chair recognizes the gentlelady from
177 California, Ms. Matsui, for 2 minutes.

178 Ms. {Matsui.} Thank you, Mr. Chairman. I want to thank
179 you and Chairman Boucher for calling today's joint hearing.
180 I would also like to thank our panelists for being with us
181 this morning as we examine the collection of use of location-
182 based commercial information.

183 Today, millions of Americans rely on different location-
184 based services and applications for a variety of activities
185 including social networking and navigation and mapping
186 services, among many others. As both broadband expansion and
187 the use of mobile devices continue to grow among consumers,
188 the industry that provides location-based services and
189 applications will only increase. In fact, according to one
190 estimate, the use of these services and applications are
191 expected to reach more than 80 million new users in North
192 America alone over the next 3 years. As we all know, in
193 today's economy information is everything to everyone, and as
194 we know, mobile devices are everything to millions of
195 consumers storing in many cases very personal information or
196 even providing their physical location.

197 With ever-increasing technologies and applications
198 emerging, it is essential that we properly protect the

199 private and personal information of consumers. Simply put,
200 privacy policies and disclosures should be clear and
201 transparent. We should also understand the scope of
202 information that is being collected, what it is used for, the
203 length of time it is retained and its security. The more
204 information that consumers have, the better. Ultimately,
205 meaningful privacy safeguards should be in place while
206 ensuring that we don't stifle innovation.

207 I thank both the chairmen for holding this important
208 hearing today and I yield back the balance of my time.

209 [The prepared statement of Ms. Matsui follows:]

210 ***** COMMITTEE INSERT *****

|
211 Mr. {Rush.} The Chair now recognizes the gentleman from
212 Florida, Mr. Stearns, for 2 minutes.

213 Mr. {Stearns.} Good morning, and let me welcome the
214 witnesses and thank you, Mr. Rush and Mr. Boucher, the chair
215 on the Telecom Committee, for having this hearing.

216 As technology continues to advance, obviously new issues
217 surrounding consumer privacy will continue to confront us.
218 My main concern continues to be protecting the privacy of
219 American consumers without of course stifling innovation that
220 is so critical to growing our economy, particularly now, and
221 keeping America globally competitive.

222 Today's hearing focuses on the use of location-based
223 services and application which collect and use location data
224 that allows a consumer to communicate, socialize, travel,
225 play, dine and shop at great convenience than ever before.
226 Location-based service technology is relatively new and as
227 such it is important to examine the privacy concerns that go
228 along with this new technology. Location-based services
229 present both an opportunity and a potential for all
230 consumers. On the one hand, consumers could receive relevant
231 information about commercial, educational and social
232 opportunities just simply based upon their location, but on
233 the other hand, consumer privacy could be undermined if

234 multiple entities have access to a consumer's location and
235 online activities.

236 So in order to maximize the consumer benefit of
237 location-based services, the privacy policies of such
238 services need to be transparent and provide a consumer with
239 informed choice regarding whether to permit access to his or
240 her location-based information. That is critical. In
241 addition, we need to ensure that consumers are not lulled
242 into a false sense of security regarding the privacy of their
243 location-based information. Now, under section 222(f) of the
244 Communications Act, wireless carriers are generally
245 prohibited from using location-based information for
246 commercial purposes without the express prior consent of the
247 consumer. However, application providers are subject to no
248 such requirement even though their applications are being
249 downloaded on the devices of wireless carriers. This may
250 falsely lead to consumers to the conclusion that application
251 providers are subject to the same prohibitions as wireless
252 carriers and that no action by consumers is necessary to
253 ensure that their privacy is protected.

254 I hope our witnesses can address this very important
255 issue but it seems to represent a gap in my mind in consumer
256 privacy protection. So clear and transparent policies should
257 be standard in regard to location-based services and

258 applications. Real transparency should include a robust
259 disclosure and notice to the consumer outside the privacy
260 policy. These notices and disclosures must be presented in a
261 clear and conspicuous manner so that the consumer knows first
262 that information is being collected, second, how the
263 information is being used, and third, what it is being used
264 for, and possibly fourth, how to prevent the collection of
265 this information.

266 Small businesses and consumers may greatly benefit from
267 the delivery of location-based technology. I mean, for
268 example, imagine that you are in a city and you have a desire
269 to have Chinese food. Location-based application could give
270 you some help right away and point you in the right direction
271 to get it. It is a win-win situation. You get your Chinese
272 food and the restaurant owner gets a customer that they may
273 not otherwise have received. Conversely, if Congress makes
274 it difficult for small businesses to reach or target
275 potential consumers, small businesses could find it
276 increasingly difficult to survive in the complex and
277 constantly changing marketplace. If comprehensive privacy
278 laws are to be developed by Congress, they must be
279 competitively and technologically neutral and they must also
280 be forward looking and adaptable. A proper regulatory
281 framework will take into account the nature of rapidly

282 changing technology. This is particularly true when it comes
283 to a location-based technology that we are talking about
284 today. Congress should not legislate in a way that is
285 restrictive of technology development or that unfairly
286 targets one industry over another.

287 Although there are certain numerous privacy concerns
288 that must be taken into account, we must also keep in mind
289 the tremendous benefit from these technologies ultimately to
290 all the consumers. The reality is that location-based
291 service technology is the wave of the future. As such, this
292 committee has a duty, a responsibility to ensure that
293 consumers are protected and free to benefit from these new
294 technologies.

295 Mr. Chairman, you and I have worked well in the past,
296 Mr. Rush and I and Mr. Boucher, on a number of issues
297 including privacy. Mr. Rush, you mentioned the idea of a
298 privacy bill. I had met with Mr. Boucher, we talked, and I
299 think Mr. Boucher has a draft bill. I understand that there
300 is a possibility that we could get this draft bill. We have
301 not seen it on this side. We urge you to give it to us. I
302 think as a result of this hearing, we may have to look at
303 ways to better inform consumers, as I mentioned earlier, on
304 the location-based applications and services with more
305 transparency. As I previously stated, there seems to be a

306 gap in consumer privacy protection between the regulation of
307 wireless carriers and the application providers. I think
308 this needs to be fixed.

309 Thank you, Mr. Chairman.

310 [The prepared statement of Mr. Stearns follows:]

311 ***** COMMITTEE INSERT *****

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312 Mr. {Rush.} The Chair now recognizes the gentleman from
313 Georgia, Mr. Barrow, for 2 minutes.

314 Mr. {Barrow.} I thank the Chair. I will waive an
315 opening statement.

316 [The prepared statement of Mr. Barrow follows:]

317 ***** COMMITTEE INSERT *****

|
318 Mr. {Rush.} The Chair now recognizes the gentlelady
319 from Florida, Ms. Castor, for 2 minutes.

320 Ms. {Castor.} Thank you, Chairman Rush and Chairman
321 Boucher, for calling this hearing.

322 Today's hearing provides a unique opportunity to learn
323 more about a technology that has a potential to impact our
324 lives in profound ways. I am looking forward to the
325 testimony of our witnesses very much.

326 The mobile devices that we carry with us now, whether it
327 is a basic cell phone or a smartphone like an iPhone or
328 BlackBerry, are now practically indispensable to Americans.
329 They are our lifelines in many respects. We rely on them to
330 organize our day, keep in touch with our children and run our
331 businesses, and the location-based technologies are
332 generating new ways of interacting, and I am very fond of the
333 function when I am traveling out of town to be able--you
334 know, it used to be that you would reach into the glove box,
335 take out the map and try to figure out--have interesting
336 discussions with your spouse about where you should have
337 turned. Now you can hit the map function and it will show
338 you, and I can find my way to the soccer tournament or the
339 business meeting where I am going.

340 So these location-based services are already very handy

341 and they have the potential to help us with emergency
342 services especially. They are enabling large companies and
343 small to track their inventory, manage their workforce and do
344 business more efficiently. A hundred million people already
345 use these, but this is going to grow exponentially.

346 Such rapid proliferation of a technology as promising as
347 LBS is awe-inspiring and bewildering. On one hand, the
348 economic and social benefits that could be generated are
349 potentially endless, but on the other hand, we need to
350 protect consumer privacy, and the need to protect consumer
351 privacy is greater than ever but the law has not kept pace
352 with this increased need. We are at a crossroads with
353 telecommunications legislation. The Communications Act of
354 1934 requires phone companies to ask for permission before
355 sharing consumer data including location information and
356 companies are sharing best practices about how to protect
357 sensitive information. Even so, we know that a large
358 percentage of companies don't yet have privacy policies to
359 prevent the sharing of sensitive location data with marketers
360 and other interested parties. There are no comprehensive
361 rules to guide these companies or courts when dealing with
362 location information privacy concerns. So any proposed
363 legislation needs to strike that balance, the right balance
364 to further spur and encourage innovation without encroaching

365 upon the privacy rights of consumers.

366 So thank you all, and I look forward to your testimony.

367 [The prepared statement of Ms. Castor follows:]

368 ***** COMMITTEE INSERT *****

|
369 Mr. {Rush.} The Chair now recognizes the gentleman from
370 Illinois, Mr. Shimkus, for 2 minutes.

371 Mr. {Shimkus.} Thank you, Mr. Chairman. You are
372 hearing a lot of the same from a lot of members. Location-
373 based services would be great, especially when you are in
374 areas that you don't know where things are. You can imagine
375 traveling and being able to get to a place where you want to
376 go, and I think a lot of people put the GPS in their baggage
377 when they get a rental car, although a lot of rental cars
378 have some of the applications now.

379 As legislators, I just want to continue to allow the
380 development of this technology, at the same time ensuring
381 consumer information is protected, and I know that is in the
382 best interest of the industry. I know it is in the best
383 interests of our citizens. So I look forward to hearing the
384 testimony and looking forward to make sure that that happens.
385 Yield back.

386 [The prepared statement of Mr. Shimkus follows:]

387 ***** COMMITTEE INSERT *****

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388 Mr. {Rush.} The Chair now recognizes the gentleman from
389 Massachusetts, Mr. Markey, for 2 minutes.

390 Mr. {Markey.} Thank you, Mr. Chairman, very much.

391 Mr. Chairman, back in 1999, I authored the privacy
392 provisions that are now contained in section 222 of the
393 Communications Act to safeguard the privacy of
394 telecommunications customers and place new duties on
395 telecommunications carriers to protect the confidentiality of
396 proprietary information relating to other carriers, equipment
397 makers and customers, and my law also included an opt-in,
398 enabling customers to request the disclosure of their own
399 personal telecommunications information to any person they
400 may choose to designate but it would be their choice to opt
401 in and so in that way I was trying to make sure that what you
402 had in your hand was a telecommunications device and not a
403 tracker, not something that could be used unless there was a
404 warrant obtained by the police, you had given your permission
405 for anyone to know what was going on with your device. And
406 now what we have to do because of what has happened over the
407 last 10 years is, we have to continue to update the laws just
408 to make sure we fill in the gaps, that we give people
409 protection. You know, if you are leaving someplace and you
410 are really planning on going to the New England Patriots-

411 Jacksonville Jaguars game, no one should be able to track and
412 see where you really went. If you went to the Patriots-
413 Jaguars game, you know, it is none of their business. They
414 shouldn't be able to do it unless you gave them permission or
415 there is a warrant out, you have been able to get legally
416 obtained permission to get access to that information. That
417 is my feeling. And if it inhibits the business plan of a few
418 software or telecommunications companies, well, that is just
419 touch luck. They have no right to know that. And so that is
420 my view on it, always has been, and I just think that this
421 makes it possible for people to know just where you are, what
422 seat you are sitting in at the Patriots-Jaguars game, you
423 know, right down the row, oh, there is he right there. ``I
424 thought you said that you were going to be out shopping this
425 afternoon.''

426 So this is a very important set of rules we have to put
427 in place, and in fact, it will create all new industries that
428 are down here. Mr. King and others are down here. There are
429 whole companies that can crop up to give you the protection
430 that you need as long as we mandate it, and innovation is out
431 there where you get to use the device, have the information
432 that you need, but it is not voluntary. We can't make it
433 voluntary because only some people will be protected because
434 it will be dependent upon the good will of an individual

435 company, individual application company as to whether or not
436 you are voluntarily protected by them, and that is just not
437 going to be good enough.

438 Thank you, Mr. Chairman.

439 [The prepared statement of Mr. Markey follows:]

440 ***** COMMITTEE INSERT *****

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441 Mr. {Rush.} Thank you. The gentleman from Louisiana,
442 Mr. Scalise, is recognized for 2 minutes.

443 Mr. {Scalise.} Thank you, Mr. Chairman. I am pleased
444 that both subcommittees are once examining the balance
445 between new technologies and privacy.

446 We can all agree that our privacy is important and we
447 should continue to balance them as technology advances and
448 develops in ways that provide tremendous benefits to
449 consumers and in ways that were previously never imagined. A
450 great example of this is the emergence of location-based
451 technologies. Whereas 10 years ago many people did not even
452 have cell phones, we can now use our mobile devices to find
453 the closest restaurant or pull up directions to a
454 destination, and in many cases, a message or coupon might be
455 sent to us from the restaurant close by or for the
456 destination we are trying to reach. These technologies and
457 the applications that employ them are tremendous advancements
458 and provide consumers with great benefits, not only
459 convenience but also during instances when a person's
460 location is needed for law enforcement personnel or during an
461 emergency situation.

462 The technological advancements we are seeing today are
463 impressive but as is most often the case, we are still

464 learning about their capabilities and their implications.
465 Even with these advancements, location-based technologies can
466 also expose consumers to certain risks such as having your
467 location routinely tracked, which could lead to identity
468 theft or stalking. As a father of two young children, I am
469 also concerned about the effects these technologies could
470 have on child safety. Therefore, we must continue to examine
471 ways to ensure consumers don't have their personal
472 information or safety compromised.

473 I look forward to hearing from our panelists today on
474 what steps they are taking and what steps they think are
475 needed to ensure that consumer protection and personal safety
476 are not compromised. I also hope our panelists discuss what
477 information is being collected on consumers and what is being
478 done with that data and whether consumers even know their
479 information is being collected. As I have stated before, the
480 technology industry is one of the most advanced and
481 competitive industries in our country. It is also one of the
482 most beneficial both for consumers and for the economy. It
483 is worth pointing out that the industry has evolved and grown
484 on its own with little regulation from the federal
485 government, some would say. Therefore, I hope we proceed
486 carefully when stepping in or when drafting legislation in
487 this area.

488 I hope today's hearing focuses on how we can protect
489 consumers and their safety and what steps the industry will
490 take or has already taken to do so. If self-regulation is
491 not sufficient and privacy regulations move forward, they
492 should be consistent across the industry and not be greater
493 for one technology compared to another. Everyone involved
494 should have to play by the same set of rules, and Congress
495 should not pick winners or losers.

496 Again, I look forward to hearing the comments of our
497 panelists today, particularly on self-regulation and whether
498 parity is needed in the industry. It is important that we
499 understand their positions and activities as well as all the
500 implications of these popular technologies.

501 Thank you, and I yield back.

502 [The prepared statement of Mr. Scalise follows:]

503 ***** COMMITTEE INSERT *****

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504 Mr. {Rush.} The Chair now recognizes the gentlelady
505 from California, Ms. Eshoo, for 2 minutes.

506 Ms. {Eshoo.} Thank you, Mr. Chairman, and to Chairman
507 Boucher as well for convening this joint subcommittee hearing
508 on the growing use of location-based technology and its
509 implications on personal privacy. I support the continued
510 effort to balance the needs of both promoting innovation and
511 protecting the personal information of customers.

512 I have long advocated the use of location-based
513 technology as a public safety tool. In fact, I am the author
514 of the E911 legislation, so I can tell you that this
515 technology is critical to first responders and to law
516 enforcement. When they locate our citizens in distress by
517 using geographical information, they literally can save
518 thousands of lives, and they have.

519 So the use of this technology, however, has
520 expanded beyond public safety and it is now widely used by
521 consumers to complete everyday tasks to make their lives
522 easier and more efficient including finding driving
523 directions, restaurants or the nearest gas station. So it is
524 highly useful, very practical and we all use it. But it is
525 also our job to look after the bests interests of the
526 American people, so we have to ensure that the location of

527 users is protected against any misuse from both corporate and
528 government interests.

529 I look forward to hearing from the witnesses and I would
530 like to especially welcome Anne Collier, who is with
531 ConnectSafely, which is co-headquartered in Palo Alto,
532 California, which is the heart of my district. So thank you
533 to both of our chairmen and I look forward to hearing from
534 the witnesses. Thank you.

535 [The prepared statement of Ms. Eshoo follows:]

536 ***** COMMITTEE INSERT *****

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537 Mr. {Rush.} The Chair now recognizes the gentleman from
538 Nebraska, Mr. Terry, for 2 minutes.

539 Mr. {Terry.} Thank you, Mr. Chairman, for holding this
540 important hearing.

541 I agree with the necessity for balance. We should be
542 examining these serious privacy concerns raised from the
543 collection of location information going on today, but I
544 believe that we must consider the great benefits these
545 location-based services can provide our first responders in
546 case of an emergency.

547 A colleague of ours, a good friend of mine, Todd Tiahrt
548 from Kansas, has recently brought to my attention an issue
549 that not only coincides with our topic of discussion today
550 but an issue I believe must be addressed in any such
551 discussion involving location information. On June 2, 2007,
552 18-year-old Kelsey Smith was abducted from a Target parking
553 lot in Overland Park, Kansas. Law enforcement was quickly
554 notified and they subsequently called her wireless provider
555 to obtain Kelsey's ping data, or call information. They were
556 denied. On June 6, 2007, 4 days after she had disappeared,
557 Kelsey's body was found. She had been raped and murdered.
558 Authorities had used the ping information to determine where
559 her cell phone had traveled after 4 days of begging and

560 pleading, so the time that they were able to ping, within 45
561 minutes after that found her dead. Law enforcement found her
562 body.

563 Now, current law states that a telecommunications
564 carrier may give call location information out to emergency
565 service providers. However, telecom carriers are not
566 required to give this information out to authorities and
567 oftentimes telecom carriers are hesitant to provide the
568 information due to potential liability. I believe it is time
569 that we require telecom service providers to provide location
570 or ping information when asked by law enforcement during
571 cases of emergencies. I encourage my colleagues to look at
572 Mr. Tiahrt's bill, join Mr. Rogers and me, and I think we are
573 going to have discussion about this specific case and its
574 implications.

575 Thank you for this opportunity. Yield back.

576 [The prepared statement of Mr. Terry follows:]

577 ***** COMMITTEE INSERT *****

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578 Mr. {Rush.} The gentleman from Indiana, Mr. Buyer, is
579 recognized for 2 minutes.

580 Mr. {Buyer.} I reserve my time for questioning. Thank
581 you.

582 [The prepared statement of Mr. Buyer follows:]

583 ***** COMMITTEE INSERT *****

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584 Mr. {Rush.} The Chair thanks the gentleman. It is now
585 my pleasure and honor to introduce our witnesses. We have
586 six witnesses before us today, and I will introduce them
587 beginning on my left. Mr. John B. Morris, Jr. is the general
588 counsel for the Center for Democracy and Technology. Seated
589 next to him is Ms. Lorrie Cranor. She is an associate
590 professor of computer science and engineering and public
591 policy at the Carnegie Mellon University. Mr. Jerry King is
592 the chief operating officer for a company called uLocate
593 Communications Incorporated. Seated next to Mr. King is Mr.
594 Tony Bernard. He is the vice president and the general
595 manager of a corporation called Useful Networks. And next to
596 Mr. Bernard is the senior vice president and general counsel
597 for the CTIA-The Wireless Association. And last but not
598 least, Ms. Anne Collier, who is with the organization
599 ConnectSafely. Again, I want to welcome each and every one
600 of you for appearing before us today, and I must note to you
601 that it is the practice of this subcommittee to swear in
602 witnesses. So I would like if you would please stand and
603 raise your right hand.

604 [Witnesses sworn.]

605 Mr. {Rush.} Let the record indicate and reflect that
606 all the witnesses have answered in the affirmative.

607 Now I will recognize each one of the witnesses for 5
608 minutes. I want to note that our timer is technically
609 incapacitated this morning so we are going to have to do it
610 the old-fashioned way. We are going to have to guess. So
611 each one of you are recognized for 5 minutes or thereabouts.
612 So beginning with you, Mr. Morris, please, your opening
613 statement.

|
614 ^TESTIMONY OF JOHN B. MORRIS, JR., GENERAL COUNSEL, CENTER
615 FOR DEMOCRACY AND TECHNOLOGY; LORRIE CRANOR, ASSOCIATE
616 PROFESSOR, COMPUTER SCIENCE AND ENGINEERING AND PUBLIC
617 POLICY, CARNEGIE MELLON UNIVERSITY; JERRY KING, CHIEF
618 OPERATING OFFICER, ULOCATE COMMUNICATIONS, INC.; TONY
619 BERNARD, VICE PRESIDENT AND GENERAL MANAGER, USEFUL NETWORKS;
620 MICHAEL ALTSCHUL, SENIOR VICE PRESIDENT AND GENERAL COUNSEL,
621 CTIA-THE WIRELESS ASSOCIATION; AND ANNE COLLIER,
622 CONNECTSAFELY

|
623 ^TESTIMONY OF JOHN B. MORRIS, JR.

624 } Mr. {Morris.} Thank you very much, and thankfully, I
625 was able to download an app yesterday onto my smartphone that
626 is a 5-minute countdown timer, so I at least will be able to
627 be on time.

628 Chairman Rush and members of the subcommittee, thank you
629 very much for inviting us to testify on behalf of the Center
630 for Democracy and Technology. We applaud the leadership of
631 the subcommittee for examining the rapidly evolving area of
632 commercial location-based services. We look forward to
633 discussing the promises and the privacy risks of these
634 services.

635 Over the past 18 months, location services have truly
636 arrived in the online environment as more and more devices
637 can obtain increasingly accurate information. Location has
638 come to permeate the online experience and we are seeing an
639 amazing array of new and innovative location-based products
640 and services. But the easy availability of location
641 information also raises a host of privacy concerns. Location
642 can reveal very privacy information and can even put users at
643 physical risk. Mobile location can reveal, often without
644 user interaction, where a person is and what they are doing.
645 It can reveal visits to potentially sensitive destinations
646 like medical clinics, courts, political rallies or, as I
647 learned today, even New England Patriot games. And sadly, we
648 have already seen location services abused in domestic
649 violence cases.

650 Unfortunately, the legal standards for the protection of
651 location information are woefully inadequate. Location
652 technology simply has outpaced the existing statutory
653 protections that Congressman Markey talked about, and they
654 are inadequate both in the commercial context as well as with
655 regard to standards for law enforcement access to location
656 information. Congress must act to strengthen statutory
657 protection of location, not only for the sake of protecting
658 privacy but also to protect and to promote innovation in

659 online services. Clear privacy rules are a prerequisite to
660 the growth and success of this valuable part of our industry.

661 My written testimony describes several technical methods
662 to determine location of a mobile device, but let me just
663 highlight one critical fact. In the old days, say, 3 or 4
664 years ago, most location determinations involved a cellular
665 carrier that provides the phone service to the device being
666 located. But in the past few years that has all changed.
667 While carriers are continuing to offer innovative location
668 services, many other service providers also offer location
669 service and they can do so wholly without the cooperation or
670 even the knowledge of the cellular carrier. For example,
671 Skyhook Wireless offers a service that can locate this device
672 in this room based solely on the WiFi access points that are
673 visible in this room, and through wireless Internet access,
674 my device can send my location to any website or service on
675 the Internet. Thus, anyone from mom-and-pop websites to
676 Starbucks can offer location-based services wholly without
677 the involvement of a cellular carrier. All a website really
678 needs to do is to add a small portion of JavaScript code onto
679 the website and they can enable location services on their
680 website, which brings me back to the legal standards to
681 protect the privacy of location information.

682 As Congressman Markey noted, commendably, Congress

683 enacted the CPNI rules to protect customer proprietary
684 network information and included location information. But
685 as has been noted a number of times in your opening
686 statements, those CPNI rules only apply to telecommunications
687 carriers offering voice services, and today many of the new
688 and innovative location services operate completely outside
689 of the reach of the CPNI rules. And unfortunately, without a
690 statutory mandate to protect location information, some
691 location service providers have been slow to do so. Some in
692 the industry are very closely attentive to privacy but others
693 are not.

694 CDT believes that Congress can help protect location
695 privacy in at least two ways. First, as Congress
696 contemplates enacting baseline consumer privacy legislation,
697 as has been discussed, we believe that location data should
698 definitely be included as part of the broader framework
699 governing sensitive user data. And second, and of relevance
700 even to the Commerce Committee as well as the Judiciary
701 Committee, whose room we are borrowing today, we believe it
702 is vital for Congress to improve the standards for location
703 access by government and law enforcement agencies. By
704 clarifying the standard, there is an ongoing battle right now
705 in courts about what the appropriate standard is for law
706 enforcement access, and by clarifying the standard, we can

707 address some of the concerns that carriers have about access.

708 So all of these points were made in more detail in my

709 written testimony and I hope to be able to answer any

710 questions you might have about these issues. Thank you very

711 much for the opportunity to testify.

712 [The prepared statement of Mr. Morris follows:]

713 ***** INSERT 1 *****

|
714 Mr. {Rush.} The Chair recognizes Professor Cranor for 5
715 minutes for opening statement.

|
716 ^TESTIMONY OF LORRIE CRANOR

717 } Ms. {Cranor.} Chairmen Boucher and Rush, I thank you
718 for the opportunity to testify today. My name is Lorrie
719 Cranor. I am an associate professor of computer science and
720 of engineering and public policy at Carnegie Mellon
721 University. I have been asked to testify about privacy
722 issues associated with the use of location information for
723 commercial purposes.

724 Location-based services use a variety of technologies to
725 acquire a user's location based on the current position of
726 cell phone, computer or other device. These technologies
727 typically use triangulation to locate the device based on
728 signals from GPS satellites, cell towers or WiFi access
729 points, often within a few hundred feet. Cellular providers
730 can obtain location information of mobile phones in that
731 manner even when the phones are not being used to place a
732 call. The Internet address of a user's computer can also be
733 used to determine an approximate geographic location,
734 typically at a city level.

735 In April 2009, we conducted a survey at CMU to
736 understand consumers' perceptions of location-sharing
737 services. We asked participants about the degree of harm or

738 benefit they associated with each of 24 scenarios.
739 Participants rated finding people in an emergency as the
740 scenario with the most significant benefit. Other highly
741 beneficial scenarios included being able to track one's
742 children and relatives, finding information based on one's
743 location, and checking to see if people are okay. On the
744 risk side, participants had significant privacy concerns.
745 They saw great harm in scenarios involving stalking or
746 revealing one's home address. They were also concerned about
747 being found by people one wants to avoid or when one wants to
748 be alone, having others intrude on one's personal space and
749 being tracked by the government, and also receiving location-
750 based ads.

751 We then evaluated 89 location-sharing applications and
752 systems to determine the types of privacy protections that
753 each one offered. We found that most of these applications
754 provided fairly limited privacy concerns, and about a third
755 of them did not even provide readily accessible privacy
756 policies on their website. Some location-sharing
757 applications had generic privacy policies that don't
758 explicitly mention location. Others mention that they
759 provide privacy controls but in order to see what controls
760 are provided, a consumer has to actually use the service.
761 Most of the applications with privacy controls required users

762 to click multiple screens to reach the privacy settings.

763 Some of the privacy controls that allow users to specify
764 that their location information should be shared only with
765 their friends rather than with the general public turn out to
766 actually have exceptions. For example, many services have a
767 simple privacy switch. It looks very simple. It says on and
768 off. But in one service we examined, text positioned four
769 paragraphs below the switch mentions that there are actually
770 two exceptions in which location information will be shared
771 even when the privacy switch is not set to share information.

772 Our research at Carnegie Mellon has explored offering
773 fine-grained and expressive privacy controls. The Locaccino
774 system we developed allows users to specify location-sharing
775 rules based on time, location and the person making a
776 location request. For example, I have set up a rule that
777 allows students to find my location when I am on campus so
778 they can determine if I am in my office or teaching in
779 another building. Another rule allows my family members to
780 locate me at all times and locations. And another rule
781 allows people I work with to locate me between 8 a.m. and 6
782 p.m. on weekdays. Locaccino is not being used for
783 advertising, but a similar approach could be used to control
784 when and where location information is used for location-
785 based advertising.

786 Our research suggests that Internet users are definitely
787 concerned about their location privacy but that most
788 currently available location-sharing services do not do a
789 good job informing them about how their location information
790 will be used or provide users with expressive location
791 privacy controls and privacy protective default settings.
792 Thus, additional privacy protections may be necessary.

793 While the CTIA best practices offer a useful framework
794 that requires notice and consent about location use, they do
795 not specify form, placement, manner of delivery or content of
796 notices nor do they provide enforcement. Thus, while users
797 may opt in to a service by signing up for it, they may not
798 realize what they are getting themselves into. As the
799 website pleaserobme.com suggests, users may not think through
800 the implications of broadcasting their location information
801 to the public or even be aware that a service makes their
802 location information public. Indeed, the CTIA best practices
803 do not discuss what should happen when location information
804 is disclosed publicly.

805 Even when users understand and are comfortable with the
806 commercial use of their location data, the use of this data
807 without a warrant by law enforcement has troubling
808 implications. Due to the way cellular technology works, the
809 widespread use of cell phones enables large-scale round-the-

810 clock surveillance of citizens. It is important that the
811 storage of individual location data be minimized and that
812 protections be put in place to limit when it can be
813 disclosed.

814 Finally, it is important to realize that techniques to
815 deidentify personal information may not be effective when it
816 comes to location information. Even when a person is not
817 identified by name, her location trails may be used to
818 identify her. Since most of us go to a particular location
819 for work each weekday and a particular location to sleep each
820 evening, with only a few days of location trails information
821 combined with other publicly available information, it
822 becomes possible to identify most people. Thus, users who
823 try to hide behind made-up names may still unwittingly be
824 identifying themselves when they make their location
825 information public. Thus, it is important that privacy be
826 considered from the beginning in the design of location-based
827 services and that users of these services are fully informed
828 about the privacy implications of their use.

829 Thank you for inviting me to testify today. I look
830 forward to answering your questions.

831 [The prepared statement of Ms. Cranor follows:]

832 ***** INSERT 2 *****

|

833 Mr. {Rush.} Thank you very much.

834 The Chair now recognizes Mr. King for 5 minutes for the

835 purposes of an opening statement.

|
836 ^TESTIMONY OF JERRY KING

837 } Mr. {King.} Thank you, Mr. Chairman and members of the
838 joint committee for inviting uLocate here today to discuss
839 the use of location information in commercial software
840 applications. What I hope to accomplish this morning is to
841 provide you with an example of how such information can be
842 used to benefit the consumer in the form of a mobile location
843 search application within a privacy-sensitive business model.

844 To start, please allow me to tell you a little bit about
845 uLocate's mobile application WHERE and how we use location.
846 We launched WHERE in 2007 and have since become a top
847 provider of mobile local search content that informs,
848 entertains and helps consumers save time and money. WHERE's
849 popularity is demonstrated by millions of downloads on top
850 phones such as the Android and iPhone and BlackBerry and
851 feature phones on most North American carriers including
852 AT&T, Sprint and T-Mobile.

853 Local content available through WHERE includes
854 everything from the weather, news, traffic, coffee shops with
855 WiFi, you name it, plus we have integrated a variety of
856 Yellow Pages search providers to further expand the
857 information available at the consumer's fingertips. WHERE

858 also helps people reach their destinations with easy-to-use
859 maps and directions.

860 In addition to providing local content and search
861 services, WHERE enables brands and advertisers to reach a
862 local audience through contextually and demographically
863 targeted ads. Interestingly, as we move from displaying non-
864 location-based banner ads last year to more targeted
865 advertising, we began to receive positive feedback from our
866 users. As opposed to expressing frustration with generic or
867 irrelevant banner ads, our users commented that our new style
868 ads were positive additions to their experience. In other
869 words, ads and offers for local businesses that make sense
870 within the consumer's experience turn out to be viewed as
871 value-added content.

872 We also noticed that such ads generated more revenue for
873 uLocate. For example, by using location, time of day and
874 other factors, we know that an ad for a local service station
875 inside of a traffic widget has a higher click-through rate.
876 Similarly, ads for local pizza shops at lunchtime perform
877 very well.

878 Next, I will provide you some details about how WHERE
879 collects location information. WHERE employs several
880 location technologies such as GPS, WiFi and network-based
881 location to determine the consumer's whereabouts. When a

882 consumer starts WHERE for the first time, they are informed
883 that WHERE will attempt to get their location. Consumers
884 that are concerned about this can also choose not to allow
885 WHERE to get location automatically. Consumers within WHERE
886 always have the option to manually set their location either
887 to their actual position on the planet or someplace else at
888 any time for any reason.

889 WHERE users can also control location accuracy. For
890 example, if the user chooses to update their location within
891 WHERE, they are presented with a list of options ranging from
892 zip code to GPS fix. For many search activities, zip code is
893 more than sufficient while a street address may provide a
894 more optimized experience for other functions. Once the
895 location of the consumer's handset is updated, we cache that
896 new location on the consumer's handset. When location is
897 sent from a handset to our backend service as part of a
898 service request as in a search, the location data is
899 encrypted.

900 Having processes and policies that address collection
901 and storage of location information is important but is only
902 part of our approach to protecting consumer privacy. I would
903 also like to address the issue of sharing location
904 information, unlike some location-based services in market
905 where it does not allow anyone to pull or monitor or track

906 the location of anyone else. We also do not allow the
907 automatic posting of locations that allow others to track a
908 WHERE user's location. Lastly, we do not share personally
909 identifiable location information of WHERE users with any
910 third parties. Having a well-defined and trusted application
911 with respect to these three behaviors has been a cornerstone
912 of our approach to protecting consumer privacy within WHERE.

913 WHERE does allow users to publish or push their location
914 to others within certain user-controlled functions such as
915 reviews or check-ins. This is done to provide the consumer
916 with the ability to generate location-specific content such
917 as a restaurant review and post that content on a variety of
918 social networks such as Facebook.

919 I hope this statement has provided you with some
920 insights into what we consider a well-behaved location-based
921 application. In sum, we use location to deliver beneficial
922 consumer experience and we put the consumer in control of
923 both managing their location information and sharing it with
924 others.

925 Thank you for the opportunity to speak with you today.
926 I look forward to your questions.

927 [The prepared statement of Mr. King follows:]

928 ***** INSERT 3 *****

|
929 Mr. {Rush.} The Chair now recognizes Mr. Bernard for 5
930 minutes.

|
931 ^TESTIMONY OF TONY BERNARD

932 } Mr. {Bernard.} Thank you. On behalf of Useful Networks
933 and the location industry, thank you to your respective
934 committees for their time and my fellow witnesses for their
935 time in this important topic.

936 I am Tony Bernard, vice president and general manager of
937 Useful Networks. Useful Networks is a Denver-based company
938 that delivers innovative local location-based services to
939 consumers, wireless carriers, application developers and
940 mobile marketers. We were founded in July of 2006 and are
941 focused on location aggregation and enablement, providing a
942 location clearinghouse and related services with our
943 PlaceWhere platform. Useful Networks is a wholly owned
944 subsidiary of TruePosition, the global leader in location
945 determination and intelligence solutions that help protect
946 citizens, combat crime and save lives.

947 A location aggregator provides its third-party partners
948 with location connectivity to a variety of sources including
949 wireless carrier infrastructure. Aggregators may also offer
950 privacy management like Useful Networks does to complement
951 the location connectivity we provide. To the gentleman's
952 points earlier, this platform is both forward looking and

953 adaptable in that it offers a multi-tiered privacy framework
954 to enable compliance with the current and future requirements
955 for access to and use of an end-user's location information.
956 PlaceWhere ensures compliance with privacy best practices as
957 manifested by a variety of stakeholders including industry
958 and government entities, wireless carriers and most
959 importantly, consumers.

960 My focus today is to talk about location-based
961 advertising. A few of the players in the location-based
962 advertising value chain include publishers, which own and
963 manage content portals via which audience is aggregated and
964 into which mobile advertisements be published. An example of
965 the type of application publisher would be uLocate and their
966 WHERE application. We also work with ad networks who
967 aggregate publisher inventory and sell ad campaigns.
968 Examples of those would include Quatro and Millennial Media.
969 We work with ad exchanges who aggregate ad networks for
970 publishers, enabling them to serve the most profitable ads
971 from the available networks.

972 Additionally, ad agencies play a role in location-based
973 advertising. They buy advertising from ad networks, assign
974 creative campaigns and sell their brands. Examples of these
975 would include traditional ones such like Saatchi and Saatchi
976 as well as emerging digital agencies like Razorfish. And

977 finally, there are location enablers like Useful Networks who
978 endeavor to establish rules by which others can engage in
979 location-based advertising and ensure they are complied with.

980 So it is important to talk briefly about the state of
981 location-based advertising in the United States. The CTIA
982 published a set of best practices and guidelines for use of
983 location services in 2008 fundamentally predicated on the two
984 principles of user notice and informed consent.

985 Specifically, the ability to use a consumer's location to
986 provide a location-enhanced advertisement is fundamentally
987 predicated upon an explicit opt-in where such consent is
988 provided by the consumer on an informed basis with respect to
989 if, how, when and by whom their location information may be
990 used. Consumers may subsequently opt out of their location
991 being used for such purposes.

992 Whereas wireless carriers tend to rigidly enforce these
993 principles, to the earlier points raised, the emerging
994 devices carrier category, examples of which would include the
995 iPhone and Nexus One devices, do not yet fall under the
996 auspices of these guidelines, and what we see now is what
997 could be perceived as a regulatory gap where consumers can
998 have very different expectations and experiences with the
999 same application if that application is on a carrier device
1000 versus a non-carrier-controlled device. I look forward to

1001 talking more about that topic.

1002 Another significant evolution in location-based
1003 advertising is the emergence of the check-in model. The
1004 emerging check-in model is enabling the transition from
1005 passive to active location sharing. Where passive is
1006 typically location tracked by the network, active is the
1007 consumer making a choice to share that location information.
1008 Examples of these include applications like BrightKite,
1009 Foursquare, Gawala, and MyTown. It is anticipated that these
1010 check-in capabilities will become an even more ubiquitous
1011 feature across a wide variety of location-based applications
1012 and services in the near future and it will be important to
1013 understand implications to these.

1014 Another component of the state of location-based
1015 advertising is how location context is enabling a transition
1016 by advertisers from paying for impression-based campaigns to
1017 performance-based campaigns. Mobile devices in general and
1018 location-aware devices specifically add significant context
1019 for advertisers. This context is unavailable via traditional
1020 advertising channels such as print and online advertising.
1021 Combining this context with mobility creates new
1022 opportunities for advertisers to improve the efficiency of
1023 their advertising spend by focusing on conversion.

1024 A few examples of location-based advertising. Useful

1025 Networks, launched a trial in 2009 working with a tier one
1026 U.S. carrier and an advertising network which in turn worked
1027 with a major fast-food chain and a major automotive company
1028 to launch two location-based advertising trials which were
1029 centered around a store finder page and were designed to test
1030 and prove the added benefits that location enablement brings
1031 to mobile marketing campaigns. These trials resulted in a
1032 yield of three times as many store finder page views as
1033 compared to the number of page views when the end-user was
1034 asked to enter their zip code.

1035 Another trial we are preparing to commence is with a
1036 company called Mobox. Mobox is a location-based mobile ad
1037 platform that serves ads into mobile content, reaching over
1038 30 million unique U.S. mobile users. Useful Networks is
1039 providing location connectivity and privacy management to
1040 enable location targeting via Mobox's platform.

1041 Again, I would like to thank their committees for their
1042 interest and attention to this important topic and look
1043 forward to talking about these issues in more earnest during
1044 the future testimony. Thank you.

1045 [The prepared statement of Mr. Bernard follows:]

1046 ***** INSERT 4 *****

|

1047 Mr. {Rush.} Thank you.

1048 The gentleman, Mr. Altschul, is recognized for 5

1049 minutes.

|
1050 ^TESTIMONY OF MICHAEL ALTSCHUL

1051 } Mr. {Altschul.} On behalf of CTIA, I want to thank
1052 Chairman Rush and Chairman Boucher, all the member of the two
1053 subcommittees for the opportunity to testify here.

1054 My name is Mike Altschul and I have served as CTIA's
1055 general counsel since 1990. In that role, on behalf of CTIA,
1056 I have been involved in the development of a number of
1057 voluntary industry best practices including CTIA's best
1058 practices and guidelines for location-based services that you
1059 have heard the other witnesses on the panel describe. I am
1060 very proud that CTIA and the wireless industry have long been
1061 at the forefront of efforts to promote location privacy. In
1062 the late 1990s, we supported the Wireless Communications and
1063 Public Safety Act, which amended section 222 of the
1064 Communications Act to require the express prior authorization
1065 of the customer for the disclosure of the wireless customer's
1066 location information for location-based services. That
1067 really has provided the foundation for everything that has
1068 followed since.

1069 In fact, in 2000, following the enactment of the
1070 Wireless Communications and Public Safety Act, CTIA
1071 petitioned the FCC to adopt a set of fair location

1072 information practices for wireless location-based services
1073 modeled upon the familiar fair information practice
1074 principles of notice and consent. More recently, as
1075 location-based services began to be deployed for applications
1076 other than E911, CTIA developed the current set of best
1077 practices to promote and protect the privacy of wireless
1078 customers' location information. You have heard what they
1079 have done and you have also heard from the other witnesses
1080 that in the 2 years since we adopted and developed these best
1081 practices, as so often happens in the wireless industry,
1082 technology has overtaken our static assumption and the
1083 location-based services now being offered turn out to be
1084 quite different from what had been envisioned just 2 years
1085 ago. You have heard how the move towards opening platforms
1086 including the iPhone and the Google Android platform, the
1087 introduction and overwhelming consumer adoption of
1088 smartphones, which include their own GPS capabilities, and
1089 the increased prevalence of GPS-enabled service applications
1090 that can be downloaded to a handset and enabled without any
1091 involvement or knowledge by a wireless carrier have combined
1092 to make a carrier-centric approach to location-based services
1093 no longer sufficient for guidelines.

1094 So these factors and the rapid developments of the past
1095 2 years have led us to reevaluate our guidelines, and as we

1096 have completed work on the new guidelines, it is our goal to
1097 ensure there will always be one clearly identified location-
1098 based service provider with the obligation to inform the user
1099 as to how location information will be used and disclosed in
1100 addition to obtaining customers' consent before initiating
1101 the service.

1102 While the scope of the new CTIA guidelines is different,
1103 the focus is not. The new guidelines will build on the
1104 foundation we laid 10 years ago by continuing to put a
1105 premium on user notice and user consent. We believe the
1106 guidelines offer a meaningful framework for the protection of
1107 user privacy and we urge policymakers to recognize that the
1108 industry's willingness to develop best practices and to
1109 revise these guidelines as circumstances warrant represents
1110 the best way to balance the needs to promote and protect user
1111 privacy while also facilitating the deployment of new and
1112 innovative products and services.

1113 A call for legislative restraint does not mean there is
1114 no role for Congress while the industry and technology
1115 evolve. Congress also has made clear that the express prior
1116 authorization of the customer is the prerequisite for the
1117 disclosure of a wireless customer's location information.
1118 While section 222 on its terms applies only to
1119 telecommunications carriers, its requirements have been

1120 observed by all providers of wireless location-based services
1121 across all the different application levels. As these
1122 services continue to evolve and develop in both predictable
1123 and unpredictable ways, Congress has an important oversight
1124 role in ensuring that all providers of location-based
1125 services deliver effective notice and obtain consent
1126 regardless of the device or technology used so that wireless
1127 users can continue to exercise informed consent to control
1128 the use or disclosure of their location information.

1129 As Mr. Morris mentioned, one area in which we believe
1130 legislative guidance may be appropriate is a clarification of
1131 the terms under which location information may be released to
1132 law enforcement. As you know, just this month in the 3rd
1133 Circuit, there was oral argument on the issue of what
1134 standards should apply when law enforcement seeks to gain
1135 access to a wireless user's location information. Most
1136 courts have allowed access to stored location records based
1137 on a court order and demonstrated need, but in the 3rd
1138 Circuit, the U.S. Department of Justice and privacy advocates
1139 argued whether access to these historical location records
1140 should meet a probable-cause standard. Service providers
1141 need clarity so as to not be caught in the middle of these
1142 disputes.

1143 Finally, we urge Congress to recognize the interstate

1144 nature of location-based services, the mobile nature of
1145 wireless users and to take care in whatever framework may be
1146 adopted to preempt state regulation of these services. A
1147 uniform national approach presents the best way of protecting
1148 user privacy and educating and informing wireless customers
1149 while fostering the innovation, investment and introduction
1150 of new location-based services by wireless carriers, device
1151 manufacturers, operating system developers and application
1152 creators.

1153 Thank you again for the opportunity to share our views
1154 with the subcommittees. We look forward to working with you
1155 as you continue your efforts on this issue.

1156 [The prepared statement of Mr. Altschul follows:]

1157 ***** INSERT 5 *****

|
1158 Mr. {Rush.} The Chair now recognizes Mrs. Collier for 5
1159 minutes for the purposes of an opening statement, and she
1160 will conclude our witnesses' opening statements. Mrs.
1161 Collier, you are recognized for 5 minutes.

|
1162 ^TESTIMONY OF ANNE COLLIER

1163 } Ms. {Collier.} Thank you, Chairman Rush and Chairman
1164 Boucher and members for me here today. My name is Anne
1165 Collier and I am co-director of ConnectSafely.org and serving
1166 as co-chair of the Online Safety and Technology Working
1167 Group.

1168 We have been following location-based services for
1169 several years now and we don't feel they represent a unique
1170 safety risk to young social-media users for several reasons
1171 that I will go into. We do, however, feel particular
1172 consideration needs to be given to children's privacy as
1173 geolocation products and services increasingly connect to
1174 children's other social tools and networks.

1175 First, some context. U.S. teens now send or receive
1176 more than 3,100 text messages a month. For them, a text
1177 isn't like a phone call, it is part of a conversation, part
1178 of the ongoing flow of their social life, and texting is only
1179 one of their tools for hanging out online and offline. They
1180 also use their phones to update their social network
1181 profiles, play games, snap and upload photos and videos to
1182 profiles, and even talk. There is as yet no data on teens'
1183 LBS use but we know that more than 65 million, or about a

1184 third, of Facebook users of all ages currently access
1185 Facebook through their mobile devices, and who is all this
1186 communication with? Research shows that the vast majority of
1187 teen social networks, 91 percent, use all these tools to
1188 socialize with friends they see regularly, usually at school.

1189 We adults think and talk about standalone products and
1190 services in terms of use but with kids, it is more useful to
1191 view LBS in terms of child and adolescent development. For
1192 example, location-based services depend a lot on users'
1193 mobility and autonomy and involve a certain amount of
1194 spontaneity. The main objectives are spontaneous in-person
1195 get-togethers and finding good places to eat or drink when
1196 you are on your own in a city. A user really needs the
1197 independence enjoyed by an older teen or adult to enjoy LBSs.
1198 The mobility of a driver's license helps too. Urban youth
1199 may have more physical mobility without a driver's license
1200 but there is no reason to believe they have proportionately
1201 more freedom from adult supervision.

1202 Meanwhile, LBSs are, to young people, just another twist
1203 on status updates. The 75 percent of teens owning cell
1204 phones now, they have for some time had other ways to let
1205 each other know their plans and whereabouts and they are
1206 constantly in touch, text messages, updates to social network
1207 profiles, Gmail chat and instant messages, to name a few.

1208 They are always in touch with each other. And remember, the
1209 operative phrase is ``each other.'' Virtually all of this
1210 communication is with known peers.

1211 Still, understandably, the most visceral and concerning
1212 risk associated with location-based and all Net services is
1213 predation. So let us go into that a little bit. Research
1214 about LBS use is needed in this area too but we do already
1215 know a lot about youth risk online. First, not all youth are
1216 equally at risk. The young people most at risk online, on
1217 phones are those most at risk already offline, and a child's
1218 psychosocial makeup and home and school environments are
1219 better predictors of risk than any technology a child uses.

1220 Second, the risk of Net-related predation is extremely
1221 low relative to real-life risk, according to David Finkelhor,
1222 director of the Crimes Against Children Research Center. In
1223 a report just last spring, Dr. Finkelhor and his co-authors
1224 wrote, ``There is no evidence that online predators are
1225 stalking or abducting unsuspecting victims based on
1226 information they posted at social networking sites.'' A
1227 recent study of how teens deal with strangers in a social
1228 site found that 92 percent of those who had received sexual
1229 solicitations had responded appropriately, ignoring, blocking
1230 or reporting the sender.

1231 Finally, a quick snapshot of an emerging privacy

1232 challenge. Because Google Buzz is brand new and a hybrid of
1233 LBSs, Gmail, microblogging and social networking, we are all
1234 at the early stages of figuring out its implications for
1235 kids, a lot of whom use Gmail. Charlene Lee, a mom and well-
1236 known industry analyst in San Francisco, blogged just this
1237 past Sunday that she discovered her 9-year-old daughter was
1238 using Buzz with her friends. They had only had one
1239 conversation so far but they had no idea their conversation
1240 was public. She thought about just disabling Buzz on her
1241 daughter's computer but the kids were enjoying it so much
1242 that Lee decided she would let her daughter keep going if all
1243 the kids kept the conversation private. And there is the
1244 rub. Ensuring that all the girls keep it private will be a
1245 project for her, probably involving communication with all
1246 the other parents.

1247 Privacy is now a collective effort on the part of users
1248 every bit as much as providers in this user-generated medial
1249 environment. It is a negotiation among users in a peer group
1250 sharing thoughts, tagging photos, et cetera. Privacy
1251 protection is user generated too, not just a matter of
1252 privacy features. This is going to take a lot of consumer
1253 education by us NGOs and the industry and government.

1254 This issue also points to the impact on children's,
1255 everybody's privacy of combining social media products within

1256 companies across devices and platforms and then across users'
1257 networks like Facebook Connect. A lot of consumer education
1258 is needed with support from industry best practices. Thank
1259 you.

1260 [The prepared statement of Ms. Collier follows:]

1261 ***** INSERT 6 *****

|
1262 Mr. {Rush.} The Chair now yields to the chairman of the
1263 Telecommunications Subcommittee, my friend, Mr. Boucher.

1264 Mr. {Boucher.} [Presiding] Well, let me thank our
1265 witnesses for their statements this morning and for your
1266 participating in our hearing and informing us on your well-
1267 studied views with regard to location-based services and
1268 privacy as associated with them. I have a series of
1269 questions I will propound to the witnesses but I want to say
1270 a word of welcome first to Mr. Whitfield from Kentucky, a
1271 friend of long standing, who is the new ranking Republican
1272 member of the Subcommittee on Consumer Protection and just
1273 say to him how much I look forward to working with him on
1274 privacy matters.

1275 The Communications Act requires opt-in consent before
1276 telecommunications carriers can disclose geolocation
1277 information but there is no federal statute or regulation
1278 that governs privacy rights associated with non-carriers who
1279 come into possession of that information whether they collect
1280 it themselves or whether they receive it from someone who
1281 does, and I am wondering what our witnesses would say to this
1282 question. Has the time arrived for Congress to adopt a
1283 statute that applies a consent requirement with respect to
1284 geolocation services information, not only to

1285 telecommunications carriers but to others who come into
1286 contact with that information? Let us begin with Mr. Morris.

1287 Mr. {Morris.} My answer to that question is a very
1288 short yes but with a qualification to say that we would
1289 certainly urge Congress to do just what you said and focus
1290 careful attention on location but we would hope it would be
1291 in the context of a larger privacy bill as opposed to a
1292 sectorially focused bill just on location itself. I mean, we
1293 have an anomalous situation in this country where my video
1294 rental records are more protected than my e-mail on Gmail and
1295 that to us doesn't make sense, so we hope that the work you
1296 do on location privacy is in the context of a broader
1297 baseline privacy bill.

1298 Mr. {Boucher.} I couldn't have provided a better answer
1299 myself. Thank you. I think you can expect to see this
1300 measure emerge as part of a larger legislative item.

1301 Mr. Altschul, I want to commend CTIA for the adoption of
1302 your series of best practices, guidelines and
1303 recommendations. I have a couple of questions for you.
1304 First of all, can you tell me the percentage of your carriers
1305 that are part of CTIA who are complying with your guidelines
1306 and recommendations at the moment?

1307 Mr. {Altschul.} We believe that all of the carriers are
1308 complying with the guidelines, which were intended to build

1309 on the principles in section 222(f) and they provide guidance
1310 and examples for how to convert--

1311 Mr. {Boucher.} So you think you have 100 percent
1312 compliance?

1313 Mr. {Altschul.} We do, for the carriers that are
1314 supporting these services.

1315 Mr. {Boucher.} I want to give you an opportunity to
1316 respond to some of the statements that Professor Cranor in
1317 her testimony made. I missed her oral testimony but her
1318 written testimony, which I have reviewed, suggests that your
1319 voluntary guidelines could be sharpened a bit, and I want you
1320 to respond to this. She says that they do not specify the
1321 form, placement or content of notices, there is no mechanism
1322 for enforcement within our guidelines, there are no
1323 assurances that the location-based service providers follow
1324 the practices--that is kind of a subset of the previous
1325 comment--and your guidelines as they specify the disclosures
1326 that the carriers should make are somewhat confusing and
1327 might lead to different kinds of disclosures being made with
1328 regard to the same kind of information among the various
1329 different carriers. Would you like to respond to those
1330 comments?

1331 Mr. {Altschul.} Yes. Thank you. First, by design, our
1332 guidelines do not provide a one-size-fits-all set of guidance

1333 or statements because the applications that fall within both
1334 the guidelines and, more importantly, the category of
1335 location-based services, do not fit one category. Certainly
1336 there is a very different set of privacy and customer
1337 expectations associated with a one-time query for a
1338 concierge-type service, where is the nearest gas station, to
1339 a continuing social networking application that links users
1340 by consent to one another's location. So rather than
1341 specifying one kind of notice, which we don't think would be
1342 appropriate across the broad spectrum of services, our
1343 guidelines address the fact that the notices should be
1344 tailored to the type of location service. I view that as a
1345 strength rather than a weakness in the guidelines.

1346 As for not all of the applications that were in her
1347 survey following even rudimentary privacy practices and
1348 notices, we recently did a survey that didn't purport to be
1349 scientific. We actually went to the websites of some of the
1350 application service providers, created a snapshot of what is
1351 being provided, and there is a range of notice and consent
1352 and privacy statements. We submitted this paper to the
1353 Federal Trade Commission last month for their privacy
1354 workshop.

1355 But through guidelines--and this will get to your
1356 question about the lack of enforcement--the industry and all

1357 of the participants in the industry, carriers and application
1358 providers alike, play a very important role in educating
1359 themselves and their customers as to what they should expect
1360 and should insist upon in using any kind of application
1361 location-based service, and that is the primary role of
1362 industry guidelines. We are not being codified in Title 18
1363 of the U.S. Code. We are trying to understand the issues--

1364 Mr. {Boucher.} Well, in the interests of time, Mr.
1365 Altschul--I am intrigued by your answers, I would like to
1366 hear more, but my time is expiring. Let me just suggest
1367 this. It might be helpful if you review Professor Cranor's
1368 comments and consider modifying your guidelines to the extent
1369 that you can sharpen them so that they provide greater
1370 clarity to the carriers, particularly on what kinds of
1371 disclosures the carriers should make with regard to services,
1372 to the information they come into contact with. I think it
1373 might be helpful. Would you be willing to consider doing
1374 that?

1375 Mr. {Altschul.} Absolutely.

1376 Mr. {Boucher.} I have one further question. My time
1377 has expired. I intend to be generous with the other members
1378 in terms of their time for questions as well.

1379 Mr. King, Mr. Bernard, let me just pose this question to
1380 you. Do you think that your customers are aware of the

1381 secondary uses that your services are making of the
1382 geolocation information about them, and do they have a
1383 reasonable expectation based on information that is made
1384 available to them that their geolocation information is going
1385 to be used by advertisers in order to target advertising to
1386 them. Mr. Bernard, Mr. King.

1387 Mr. {King.} Thank you, Mr. Chairman. One way to answer
1388 that is that the location information goes out to an
1389 advertising network and requests an ad so the location is
1390 just--it is not personally identifiable so that there is no
1391 information about that consumer going to the advertiser. We
1392 are selecting from an inventory of ads and then bringing them
1393 in and showing what we think are the most appropriate ad,
1394 given that context.

1395 Mr. {Boucher.} Well, that is understood, but the
1396 question is, does that person have a reasonable expectation
1397 that those events are going to happen, that the advertisers
1398 are going to be marketing to them based in part on their
1399 location?

1400 Mr. {King.} Yes. We have a location-based application
1401 that is both free and ad driven where you can pay a
1402 subscription fee so they are free applications we believe
1403 that consumers expect to be ad driven, so the short answer
1404 would be yes to that.

1405 Mr. {Boucher.} Mr. Bernard.

1406 Mr. {Bernard.} Thank you. Useful Networks does not
1407 support secondary uses to now, as I think about them, where
1408 secondary use is using that location subsequently beyond that
1409 for which you have already provided notice. So specifically
1410 in our mind, we provide primary use, and an example of that
1411 is our location-based advertising trial. End-users were
1412 presented with a banner ad on the mobile website enticing
1413 them to click on it to see a viewer location or a quick serve
1414 burger location near them. The next page they saw explicitly
1415 said please allow us to use your location to provide a list
1416 of stores near you, and only if they clicked were they
1417 provided--

1418 Mr. {Boucher.} All right. That is very clear. Thank
1419 you. Mr. King and Mr. Bernard, I just want to pose one
1420 further question to you, and it is the same question I asked
1421 Mr. Morris at the outset. Is it time that we had a federal
1422 statute in order to provide a uniform set of standards across
1423 applications, not just for the telecom carriers but for those
1424 who are providing applications, selling applications, using
1425 applications as well?

1426 Mr. {King.} I would say in general, yes.

1427 Mr. {Boucher.} Thank you. That is a great answer.
1428 That is what I am looking for.

1429 Mr. Bernard?

1430 Mr. {Bernard.} It should be a uniform set of practices,
1431 not necessarily legislation.

1432 Mr. {Boucher.} Well, okay. That is half a loaf. Thank
1433 you all very much.

1434 The gentleman from Kentucky, Mr. Whitfield, is
1435 recognized for his questions.

1436 Mr. {Whitfield.} Thank you, Mr. Chairman.

1437 And Mr. Bernard, I didn't hear the last part of your
1438 answer. Would you repeat that for me?

1439 Mr. {Bernard.} The last part of that more specifically
1440 spoke to self-regulation. We believe there are certainly
1441 business incentives both on the part of the distribution
1442 centers, whether they are carriers or device manufacturers,
1443 as well as on consumers in that they won't use services where
1444 they feel like their privacy is not respected.

1445 Mr. {Whitfield.} Well, everyone--

1446 Mr. {Bernard.} We do agree with a level playing field.

1447 Mr. {Whitfield.} Everyone on the panel has had the
1448 opportunity to answer that question except a few. Professor
1449 Cranor, what is your position on Chairman Boucher's question?

1450 Mr. {Cranor.} Yes, I think that it is probably time to
1451 have some legislation to have some privacy rules, but like
1452 Mr. Morris, I think that we shouldn't have a very narrow view

1453 on just location if we are going to set privacy rules, that
1454 there is a need for more general privacy legislation.

1455 Mr. {Whitfield.} And Ms. Collier, what is your
1456 position?

1457 Mr. {Collier.} I agree with that. I think it is time
1458 to update privacy law but, you know, it needs to coordinate
1459 with COPPA, the Children's Online Privacy Protection Act, but
1460 it shouldn't refer to just a single technology.

1461 Mr. {Whitfield.} And Mr. Altschul?

1462 Mr. {Altschul.} Well, we certainly endorse the idea of
1463 a level playing field and the consumers don't have to guess
1464 as to what their privacy rights are. We are always concerned
1465 that despite the best of intentions, when these principles
1466 are codified, either technology or unintended consequences
1467 will get in the way.

1468 Mr. {Whitfield.} Professor Cranor, in your testimony
1469 you talked about a system that was developed at Carnegie
1470 Mellon, and I am not sure the pronunciation but is it
1471 Locaccino? Locaccino. Now, how widespread is that type of
1472 technology being used?

1473 Ms. {Cranor.} So our particular system is a research
1474 system that is being used by a thousand people. It is
1475 similar technology to what is being used by commercial
1476 providers. The main difference is that we have gone out of

1477 our way to provide privacy controls at a very fine-grained
1478 level for people who use it.

1479 Mr. {Whitfield.} I see. And, you know, this is
1480 deviating a little bit from the technical aspect of this but
1481 also I found it interesting in your testimony, you said in
1482 your survey, we found that most of our participants did not
1483 expect that location-sharing technologies would be all that
1484 beneficial to them, and then that they did have significant
1485 concerns about their privacy when sharing their locations
1486 online. So what is your overall conclusion of that? It
1487 sounds like to me this is a service that is really not all
1488 that beneficial but--

1489 Ms. {Cranor.} Well, so what we found is that the
1490 general public for the most part doesn't understand why they
1491 would want location-based services. Now, there are plenty of
1492 people who have adopted them who do get it and they say yes,
1493 this is useful to me and I want to use them. But they are
1494 right now the minority of the population.

1495 Mr. {Whitfield.} So you found most people just simply
1496 were not aware of the benefits of it?

1497 Ms. {Cranor.} Right. They don't find it beneficial,
1498 and when we talk about this with people, you know, the notion
1499 that there is a map and there is a pinpoint and that is me on
1500 it, that really scares people.

1501 Mr. {Whitfield.} Right. I would just ask you, Mr.
1502 Morris, let us assume for the moment that we are going to
1503 regulate Internet privacy. Should the FCC do the regulating
1504 or should the FTC do the regulating or should different
1505 regulators govern different parties?

1506 Mr. {Morris.} Well, we would suggest that the FTC is
1507 probably the better place to go for two independent reasons.
1508 One, the FTC has a very long track record and experience in
1509 looking at consumer privacy issues, and they have already
1510 through a number of workshops over the years have been
1511 looking specifically at location privacy. And secondly, the
1512 FCC is frankly really not the federal Internet commission.
1513 It really doesn't have a broad mandate to regulate the
1514 Internet. It doesn't frankly have regulatory experience at
1515 the application layer. It is obviously critically important
1516 at the lower layers of the communications stack and so, you
1517 know, its regulation of telecommunications carriers and
1518 underlying broadband services is clear and appropriate but it
1519 doesn't really have as extensive experience in the privacy
1520 area at the applications layer as the FTC does.

1521 Mr. {Whitfield.} Thank you all, and I see my time is
1522 expired.

1523 Mr. {Boucher.} Thank you, Mr. Whitfield.

1524 The gentlelady from Florida, Ms. Castor, is recognized

1525 for 5 minutes.

1526 Ms. {Castor.} Thank you, Chairman Boucher.

1527 Mr. Altschul, I thought it was interesting, you said
1528 that even though all of your members are adherent to best
1529 practices that technology has overtaken best practices. So I
1530 guess in effect you are conceding that given how valuable the
1531 location data could be to marketers and it is to advertisers,
1532 that industry self-regulation is not realistic.

1533 Mr. {Altschul.} No, what I meant to convey by saying
1534 the technology has overtaken our guidelines, our guidelines
1535 just 2 years ago were carrier centric. Carriers were clearly
1536 covered by section 222 of the Communications Act. That was
1537 before the introduction of iPhones and introduction of
1538 smartphones that have their own GPS receivers and before the
1539 broad adoption of WiFi public access points. What surprised
1540 the experts in the industry was how quickly the landscape
1541 changed in using this technology so that as you heard from
1542 everyone on the panel and many of the opening remarks today,
1543 increasingly location-based services and applications do not
1544 touch a wireless carrier's network. They have no knowledge
1545 of the application being used. What we have done is, we have
1546 gone back and in effect broadened our guidelines so that they
1547 are no longer going to be carrier centric but provide the
1548 same touchstones of consumer notice and consent regardless of

1549 whether the application runs with a carrier's knowledge or
1550 not.

1551 Ms. {Castor.} So I think you stated clearly, you see
1552 your responsibility and your membership educating the
1553 consumer. Does that need to be something that is promoted in
1554 a specific sort of way as we develop new consumer consent
1555 provisions?

1556 Mr. {Altschul.} I think that is the responsibility for
1557 all of the stakeholders, the industry, public policymakers,
1558 educators and the like, yes.

1559 Ms. {Castor.} Ms. Collier, could you touch on what are
1560 some of the innovations in the arena of emergency services?
1561 Are we doing enough there as the law? Do we need to focus on
1562 any specific provisions in updating that?

1563 Ms. {Collier.} Emergency services and helping children
1564 be found?

1565 Ms. {Castor.} The children's angle is really your area
1566 of expertise.

1567 Ms. {Collier.} Yes.

1568 Ms. {Castor.} Who best on the panel can address whether
1569 or not we need updates when it comes to emergency services in
1570 relation to LBS? Mr. Morris, go ahead.

1571 Mr. {Morris.} I am always game to try to answer a
1572 question. You know, the emergency--and I have actually

1573 worked in technical standard-setting bodies on the transition
1574 in the emergency system from the old analog system to kind of
1575 a new IP-enabled Internet protocol-enabled, system, and the
1576 emergency community is very aggressively trying to make that
1577 transition but it is a very costly transition, and so I
1578 believe, my perception is that the FCC and the emergency
1579 community is actually proceeding at a fairly healthy pace to
1580 make the transition to IP-enabled emergency services and
1581 ultimately, you know, I think that some years from now, a
1582 couple of years from now, we really will have the ability to
1583 both dial 911 on this device and then take a picture of the
1584 auto accident that happened so that the emergency response
1585 facility can actually see the situation even before they send
1586 their responders. So my perception is that we are in fact
1587 making that transition, it is going to be a costly
1588 transition because there are lot of public service answering
1589 points, PSAPs, that are not currently technically and
1590 physically set up to do IP-enabled services like that. But
1591 the transition is underway.

1592 Ms. {Castor.} Any other comments on that?

1593 Thank you. I yield back.

1594 Mr. {Boucher.} Thank you, Ms. Castor.

1595 The gentleman from Florida, Mr. Stearns, ranking member
1596 on our Telecom Subcommittee, is recognized.

1597 Mr. {Stearns.} Thank you, Mr. Chairman.

1598 Mr. Morris, I was watching the television back in my
1599 office and I saw that the gentleman from Kentucky asked you
1600 about jurisdiction and about whether the FCC or the Federal
1601 Trade Commission should be involved, and I think your
1602 statement was that the jurisdiction for the Internet should
1603 be the Federal Trade Commission. Is that what I am to
1604 understand you said?

1605 Mr. {Morris.} Well, really, my position would be more
1606 that the jurisdiction of a privacy should be at the Federal
1607 Trade Commission. Frankly, I would urge that the Internet
1608 generally speaking doesn't need to have a designated agency
1609 that has broad jurisdiction over it. It really is a success
1610 story of non-regulation, and Congress in 1996 in section 230
1611 of the Communications Code really set out its policy of
1612 having the Internet grow and develop without regulation.

1613 Mr. {Stearns.} All right. Let us assume what you are
1614 saying is that the privacy on the Internet--as you know, the
1615 FCC now has taken steps to address what they perceive as a
1616 problem and they have called it Net neutrality. I call it
1617 Net regulation. Based upon what you said dealing with
1618 privacy, would you agree with me that perhaps the FCC does
1619 not have the jurisdiction to regulate with its promulgating a
1620 Net Neutrality under the same assumptions that you made from

1621 the gentleman from Kentucky that privacy should be under the
1622 Federal Trade Commission and the FCC has no jurisdiction over
1623 it?

1624 Mr. {Morris.} Well, let me--

1625 Mr. {Stearns.} Would that be a fair statement?

1626 Mr. {Morris.} No, it wouldn't, Your Honor, if I could--
1627 Your Honor--

1628 Mr. {Stearns.} I was hoping you would say yes.

1629 Mr. {Morris.} If I could explain, let me answer it by
1630 saying that the Internet first grew up in a dial-up world
1631 where it rode on top--

1632 Mr. {Stearns.} I need you to be concise, so you say no.
1633 But let me ask you--

1634 Mr. {Morris.} I think I can offer a one-sentence
1635 answer.

1636 Mr. {Stearns.} So I am just trying to sort of
1637 pigeonhole you here.

1638 Mr. {Morris.} I appreciate that.

1639 Mr. {Stearns.} Okay. So your argument was, the
1640 Internet grew up without regulation, you talked about in
1641 1996, and how the idea was not to have regulation and let it
1642 expand without interference. That is what you said. And
1643 then you indicated that privacy should be under the Federal
1644 Trade Commission rather than the FCC. So would it be fair to

1645 say that any type of regulation of the Internet should not
1646 come through the FCC?

1647 Mr. {Morris.} I think it is appropriate for the FCC to
1648 regulate the underlying telecommunications platform on which
1649 the Internet runs.

1650 Mr. {Stearns.} Phones, cable, broadcasting but not the
1651 Internet itself?

1652 Mr. {Morris.} Not the applications and services that
1653 ride on top of--

1654 Mr. {Stearns.} Okay. That is good enough for us. We
1655 appreciate your opinion. Let me follow up. You described a
1656 potential risk of location data being stored and used well
1657 into the future. Is there harm if the information is not
1658 tied to an individual? How often is the identity of the user
1659 known to the application provider and what information can an
1660 application provider gather about a consumer's identity and
1661 his or her habits?

1662 Mr. {Morris.} Well, certainly if information is truly
1663 deidentified and anonymized, it presents less concern. But
1664 as Professor Cranor noted, there is a unique individual in
1665 this world who lives where I live and works where I work and
1666 so tracking my location over time could easily be tracked
1667 back to me through that. So I do think there are very
1668 serious concerns about retaining location over a longer

1669 period of time beyond the use that it is first obtained for.

1670 Mr. {Stearns.} Professor Cranor, location-based
1671 services are still I think in their infancy with their
1672 development and we just don't know where it is going to go
1673 from here. Would you believe that the federal government
1674 should address with regulation some of the new technology
1675 concerns that could possibly even hinder the development of
1676 future benefits? In other words, if we step in right now, is
1677 it a concern of yours that we could actually hinder this
1678 infancy type of industry and you might even say in your best
1679 mind where this industry will be 10 years from now, 5 years
1680 from now.

1681 Ms. {Cranor.} So I agree that the industry is in its
1682 infancy, and it is somewhat hard to predict where it will be
1683 but I would imagine it will be very different 10 years from
1684 now than it is today and probably location-based services
1685 will be in much more widespread use. I think there is always
1686 a risk of stifling innovation with legislation. On the other
1687 hand, I think we do have some serious concerns, and rather
1688 than waiting 10 years and discovering that we are all in
1689 trouble, it would be good to kind of set things straight from
1690 the beginning and really have systems built with privacy
1691 designed in from the beginning. So I would urge you to
1692 consider legislating on privacy from the beginning and making

1693 that part of a more general privacy framework.

1694 Mr. {Stearns.} If you were me and you were doing a
1695 privacy bill, what would you suggest as being part of
1696 location-based privacy? You are writing the bill now
1697 yourself.

1698 Ms. {Cranor.} Right. Fortunately, that is not my job
1699 but--

1700 Mr. {Stearns.} Well, just hypothetically.

1701 Ms. {Cranor.} But hypothetically, so I think there
1702 probably should be some limits to the use of location data
1703 but also I think it is very important to make sure that
1704 individuals are fully aware and informed of use of their
1705 location data and that there are robust consent experiences
1706 available to them.

1707 Mr. {Stearns.} So a person could opt out or opt in?
1708 What would you prefer?

1709 Ms. {Cranor.} I think generally opt in, although I
1710 think it depends on what you mean by opt out and opt in in
1711 this situation.

1712 Mr. {Stearns.} Thank you, Mr. Chairman.

1713 Mr. {Boucher.} Thank you very much, Mr. Stearns.

1714 The gentleman from Maryland, Mr. Sarbanes, is recognized
1715 for 5 minutes.

1716 Mr. {Sarbanes.} Thank you very much, Mr. Chairman.

1717 Ms. Collier, I am going to direct these questions to
1718 you. I guess you can answer them generally when it comes to
1719 privacy and so forth and particularly with respect to
1720 location-based services if you want. Would you say that
1721 there should be a higher standard of privacy at work when you
1722 are dealing with children as opposed to adults just generally
1723 speaking?

1724 Ms. {Collier.} Yes, I would, and I think there is a
1725 higher standard applied right now with the Children's Online
1726 Privacy Protection Act that is being administered by the FTC.

1727 Mr. {Sarbanes.} One of the things that intrigues me is
1728 that children are the leading edge of the use of technology
1729 these days.

1730 Ms. {Collier.} Some technologies, yes.

1731 Mr. {Sarbanes.} Well, they are the leading edge of use
1732 of many technologies that have significant privacy
1733 implications. Wouldn't you agree, or not?

1734 Ms. {Collier.} Yes, some technologies that would have
1735 privacy implications. You know, they are not big on Twitter,
1736 they are not blogging as much anymore. It is a moving
1737 target. But, yes, absolutely, privacy is a tremendous
1738 consideration where children are concerned.

1739 Mr. {Sarbanes.} I mean, it strikes me that adolescence
1740 plus technology is a privacy nightmare in some ways.

1741 Ms. {Collier.} Yes, and that is what I was basically
1742 saying in my testimony is that location-based technologies
1743 and services are not, you know, a unique problem in this
1744 area. Children are constantly in touch with each other,
1745 constantly updating their status, their location with each
1746 other regardless of the technology.

1747 Mr. {Sarbanes.} And notification and notice and consent
1748 provisions or regimes that are established are also ones that
1749 sort of become like quicksand when you are dealing with kids.
1750 I mean, for example, Facebook I think has a rule that you
1751 have to be 13.

1752 Ms. {Collier.} Right. Facebook complies with COPPA.

1753 Mr. {Sarbanes.} Right. Well--

1754 Ms. {Collier.} There are a lot of kids under 13 who use
1755 Facebook.

1756 Mr. {Sarbanes.} Who we kidding?

1757 Ms. {Collier.} Right.

1758 Mr. {Sarbanes.} Yes. So the kids are going on and
1759 representing--I guess they have to, I mean, I haven't gone
1760 through the process--but representing that they are meeting
1761 the standard when everybody knows that they are not. The
1762 teachers know. I mean, two-thirds of these classes of 12-
1763 year-olds and 11-year-olds, they are all on Facebook. So I
1764 guess what I am asking you is, how do we address that issue,

1765 which is that to me a lot of the privacy standards and
1766 expectations we have is either wishful thinking or it is a
1767 kind of wink-and-nod exercise when you lay it against just
1768 how compelling and seductive and powerful these technologies
1769 are, particularly for young people, and it makes me feel that
1770 it is almost futile, not quite perhaps, but to try to
1771 establish these things when it comes to protection of kids
1772 and privacy standards and other things, and I just ask you to
1773 reflect on that for the remainder of my time.

1774 Ms. {Collier.} Well, I completely agree that what we
1775 are dealing here largely with is adolescent and child
1776 development and behavior, not technology, and that is very,
1777 very difficult to regulate. I do think that COPPA is a very
1778 important sort of baseline standard and the FTC is currently
1779 reviewing, you know, the rules and the enforcement of COPPA,
1780 rightfully so, but it does effectively protect children's
1781 protection under 13. But regulation is not the solution
1782 here. I really believe that consumer education is the
1783 solution, and I would love to see more thought given to
1784 consumer education and product development teams, that
1785 product development teams and the industry would be putting
1786 on their parent hats more and that consumer education happens
1787 right with product launch or when a product is in beta.
1788 There is no substitute for parental care and so consumer

1789 education involves both parents and children and it has to
1790 come through schools, it has to come--you know, we can't keep
1791 these products and services out of children's experience in
1792 school either. They are part of 21st century education. And
1793 therefore to encourage schools to block social media from
1794 school is absurd because you can't teach swimming without a
1795 pool and we can't hold back the competitiveness of American
1796 education. We have got to get technology into schools and
1797 stop giving teachers an excuse not to teach with social and
1798 interactive and new media, whatever you want to call it.

1799 Mr. {Sarbanes.} That is a great answer. Thank you.

1800 Mr. {Boucher.} Thank you very much, Mr. Sarbanes.

1801 The gentleman from Indiana, Mr. Buyer, is recognized for
1802 7 minutes.

1803 Mr. {Buyer.} Ms. Collier, I want to pick up where you
1804 just left off. The level of cyber bullying and sexting that
1805 is going on right now, so for you to make a blanket statement
1806 that says that, you know, don't take these devices away from
1807 kids, I am almost to the point as a parent--my children went
1808 through public school. It has gotten so bad, I would
1809 probably find a private school that says my children are
1810 going to wear a uniform and they are not going to have access
1811 to technology like cell phones during school hours, and that
1812 is almost to the point where it has gotten.

1813 Ms. {Collier.} That would be the easy way. I have kids
1814 in public school too, 12 and 18, and it would be easy just to
1815 ban all technology from their lives. But what would that do
1816 to them? What would that do their social lives?

1817 Mr. {Buyer.} I don't believe it is banning it from
1818 their lives but it is definitely--

1819 Ms. {Collier.} Within reason?

1820 Mr. {Buyer.} The cyber bullying is really extraordinary
1821 that is going on right now, or how--I won't get into the
1822 sexting part of it. Let us just do the cyber bullying for a
1823 moment, how they can marginalize, isolate and then destroy
1824 someone that is 13 whereby that reputation is everything to
1825 them. Also, reputation is everything to us. I mean, if you
1826 want to talk about cyber bullying, be a member of Congress
1827 and deal with the yahoos that we get to deal with, and I
1828 don't mean the website either. I mean, we experience cyber
1829 bullying all the time.

1830 I am going to pick up on something else Mr. Sarbanes had
1831 just said. He is absolutely correct, I believe, about the
1832 nightmares that this creates when you put technology in the
1833 hands of our children. At the same time, when it comes to
1834 privacy, as a parent, my children had limited privacy, and
1835 guess what? I have the right as a parent to spy on my
1836 children.

1837 Ms. {Collier.} Yes.

1838 Mr. {Buyer.} I have that right in my oversight to
1839 ensure that they are where they said they are going to be.

1840 Ms. {Collier.} Absolutely.

1841 Mr. {Buyer.} And I will tell you what, I would love to
1842 have as a parent the actual location ability on a GPS to know
1843 where my children are.

1844 Ms. {Collier.} You can have that.

1845 Mr. {Buyer.} I know. That is why I am saying. So with
1846 regard to this ``privacy'' so how we have to balance this,
1847 Mr. Sarbanes, with regard to how we protect our children from
1848 the outside in. At the same time, as a parent, how do we
1849 gain access to know what they are doing at all times. And
1850 there is a balance. And so when you made this comment about
1851 how do we get parents to take an active role and interest in
1852 the lives of their children, government isn't going to be
1853 able to do that. But you are right when you say about
1854 education. You are right, I also believe in corporate
1855 responsibility when the products come out. I also believe
1856 that our schools, since they are also the guardian of our
1857 children while they are gone, also have a social
1858 responsibility.

1859 Ms. {Collier.} We have also got to stop scaring the
1860 bejeebers out of parents. We have done a very bad job of

1861 that. We have had a predator panic in this country for
1862 several years, and what that fear does is cause parents to
1863 overreact and shut things down rather than communicate with
1864 their kids.

1865 Mr. {Buyer.} But how do we--we can do all the things I
1866 just said. This issue on cyber bullying, how do we--

1867 Ms. {Collier.} Cyber bullying is just an electronic
1868 extension of bullying so what you are asking me is what do we
1869 do about bullying, and that is probably beyond the purview of
1870 this hearing but we should all be thinking about that.

1871 Bullying is--

1872 Mr. {Buyer.} But bullying used to be a little more
1873 isolated. If they find themselves out at recess, if they
1874 find themselves at the gym, if they find themselves at the
1875 cafeteria, but now you can be in the classroom, you can be
1876 anywhere and you can be cyber bullied at any moment at any
1877 time because they make some statement or they make up a
1878 scenario and this kid then is tortured, you know, constantly.
1879 So it is more aggravated.

1880 Ms. {Collier.} We need to get the schools up to speed
1881 on this, so we are working hard at that.

1882 Mr. {Buyer.} As a parent, my children are now grown but
1883 I can tell you, I think the cyber bullying is really getting
1884 out of hand. I mean, you can turn on the news and you find

1885 that someone has now committed suicide and you discover that
1886 they were cyber bullied or some 16-year-old thought it would
1887 be cute to send a naked picture to her boyfriend, he then
1888 sent that to someone else and she commits suicide. I mean,
1889 this technology is also being used in a manner which we never
1890 anticipated by individuals who don't completely understand
1891 the realm of responsibility. Anyway, I appreciate you having
1892 this conversation with me. I yield back.

1893 And thank you, Mr. Sarbanes. You brought up a really
1894 good issue.

1895 Mr. {Boucher.} Thank you very much, Mr. Buyer.

1896 We have recorded votes pending on the Floor, and I think
1897 we probably have time for one more member to propound
1898 questions. Mr. Space is next. And then following that, we
1899 will need to have a recess. Mr. Doyle, I am sorry--

1900 Mr. {Space.} Well, actually, Mr. Chairman, I am going
1901 to pass.

1902 Mr. {Boucher.} Oh, you are going to pass? Well, thank
1903 you, Mr. Space. That does help us.

1904 Mr. Doyle, the gentleman from Pennsylvania.

1905 Mr. {Doyle.} Thank you, Mr. Chairman, and my apologies
1906 for being late. We had several hearings at the same time.

1907 Professor Cranor, welcome to this panel. It is always
1908 good to see someone from CMU here and not just because they

1909 are in my district, Mr. Chairman, but it is one of the great
1910 universities in America, and your work has been very helpful
1911 to this committee.

1912 Professor Cranor, tell me, in your testimony you
1913 mentioned that Internet users legitimately care about their
1914 location privacy but that the current system isn't set up in
1915 such a way to give users a good sense of how location-based
1916 service providers will use that information nor do most
1917 location-based service providers supply users with
1918 comprehensive privacy controls and protective default
1919 settings, and you add that further additional protections
1920 might be necessary. I wonder if you could just elaborate a
1921 little bit on what additional protections may be necessary to
1922 ensure that we have proper control over location information,
1923 and do you think it requires Congress to take any action?

1924 Ms. {Cranor.} So I think that we need to start with at
1925 least having some guidelines which give more specific
1926 guidance about what is acceptable notice to users. You know,
1927 the fact that providing notice, you know, buried in the
1928 legalese of a privacy policy is not providing adequate
1929 notice, and guidance that, you know, saying well, you have
1930 privacy but there are exceptions and you have to go read the
1931 fine print, those sorts of things are not providing people
1932 with adequate notice. You know, as Ms. Collier raised, you

1933 know, with Google Buzz, you know, people started using it and
1934 had no idea that everything was public and that is a very
1935 common thing that we have seen in our research is that people
1936 use these services, they think only their friends are seeing
1937 their information, only their friends are seeing their
1938 location and yet it is being made public. So I think we need
1939 at the very least guidelines for the service providers and
1940 perhaps actually regulation along those lines as well.

1941 Mr. {Doyle.} I mean, what options do consumers really
1942 have today for choosing or negotiating their own privacy
1943 preferences? I mean, are there technologies available that
1944 would let consumers express their own privacy preferences up
1945 front where they could say up front this is how I want my
1946 information to be used and this is who I want to be able to
1947 see it?

1948 Ms. {Cranor.} Well, I think in the commercial services
1949 today, you can do that to a limited extent so there are some
1950 that you can certainly turn off the location sharing. There
1951 are some that let you choose between sharing with the public
1952 or sharing with a group of designated friends. So there are
1953 some controls but they tend to be fairly course grained, and
1954 you can't really have your cake and eat it too with most of
1955 them. With some of the more experimental systems like our
1956 research on Locaccino at CMU, you can actually have much

1957 finer-grained controls and so I think it would certainly be
1958 possible to give consumers a lot more options and a lot more
1959 control but we are not actually seeing that being deployed in
1960 commercial services.

1961 Mr. {Doyle.} Now, Mr. Morris, I saw you either laughing
1962 or smiling so I want to give you a chance to grab the
1963 microphone and chime in if you would like.

1964 Mr. {Morris.} I started working in 2001 with the
1965 Internet engineering task force on a protocol called GeoPriv,
1966 geographic privacy, that attempts to do exactly what you are
1967 proposing, attempts to allow users to set the rules to say
1968 you can keep my information only for 24 hours and you can't
1969 pass it on to anybody else, and there's been some uptake with
1970 that technology but unfortunately at the applications layer,
1971 the Worldwide Web layer, that technology has not been
1972 accepted. We have been working to try to get it implemented
1973 at the applications there. So certainly the technology is
1974 out there. I frankly think it will take an act of Congress
1975 to really get the industry to really try to give users the
1976 level of control that you are talking about.

1977 Mr. {Doyle.} Mr. Chairman, I know we have votes
1978 pending. Thank you for your patience. And to all the
1979 panelists, thank you for being here today.

1980 Mr. {Boucher.} Thank you very much, Mr. Doyle, and I

1981 want to express appreciation also to each of you. Your
1982 testimony has been informative and helpful to us.

1983 The record for this hearing will remain open for a
1984 period of time, and there may be questions that members want
1985 to submit to you. If you receive those, please reply to them
1986 promptly. And we do appreciate your help. This has been
1987 very beneficial for us.

1988 This hearing stands adjourned.

1989 [Whereupon, at 12:04 p.m., the Subcommittees were
1990 adjourned.]