Mobile Millennium project promises to track traffic with cellphones

by Donald Melanson, posted Nov 7th 2008 at 12:41PM

UC Berkeley has been working on using cellphones to track traffic for some time now, first under the the decidedly less expansive Mobile Century project, and now under its new Mobile Millennium project, which has the backing of Nokia, NAVTEQ, and others. It actually first kicked off earlier this year, but it looks like it's now about to take another big step forward, with the researchers set to open things up to the general public -- or the general public in Northern California, at least. The idea here is to collect data from folks with GPS-equipped cellphones and combine it with existing traffic data, and then in turn make that information accessible via cellphone to let you plan out the speediest route. According to the researchers, the software will work on both Nokia and non-Nokia phones, but it seems that they've only tested it on the E71 and N95 so far (you can also view real-time traffic data on your computer). More details will apparently be announced when this new stage of the project officially gets underway on November 10th, but those interested in taking part can already register by hitting up the read link below.

[Thanks, Eric M]

Update: In case you're wondering about the potential privacy concerns here, UC Berkeley has said that it has built privacy safeguards into the system from the beginning to ensure that no data can be tied to a particular phone, and it also notes that users can control the service themselves and, of course, shut it off anytime they don't want traffic data to be transmitted.
and soon you will get text messages saying money has been deducted from your account for speeding.

This is simultaneously cool and scary. Sacrificing privacy to get find the best way home? Not sure I want that...

So what if you have your cellphone and are walking next to a busy street... How does it know you aren't in a car?

Humans walk slower than a car usually drives. GPS can estimate velocity, not just direction.

That said, if you run really fast next to a busy road, will you be able to fool the system? :)

This seems like a big invasion of privacy. Do not want.

What are you hiding or what do you not want people to find out? The way I see it, people who are scared about "Invasion of Privacy" are trying to hide something and should be sought out anyway.

Do you think anyone watching these systems cares that you go to a grocery store at Mid-Night, or that you call your best friend to talk about girls? "Invasion of Privacy" is wayyyyyy over rated.

Anonymous data, possibly only sent whenever you are running the particular mapping program, without any sort of telephone number involved... This doesn't strike me as an issue. The only uniquely identifiable information that may be sent is your phone's temporary IP address, a username/pw to login, and maybe, possibly, but probably not, your phone's ESN or IMEI, as a unique serial.

You want total privacy? Disable the GPS chip in your phone entirely. Or better yet, remove its battery. Thats the -only- way they can't track you. Yes, cell-site position/time-of-arrival is actually relatively good...

Crying over spilled milk i tells ya!
It's just as anonymous as having a MAC address tied to a login/password whenever you login to any website online.

Speaking of tinfoil hats, I wouldn't be the slightest bit surprised if -- and I even expect that they do -- the NARUS boxes in secret rooms at AT&T and other telecom companies were parsing and archiving every single word I type on the internet, any VoIP calls I make, and every website I view.

There are certain things I don't want people to have, and for this, I just go talk in person.

How is it an invasion of privacy if your signal (indistinguishable from others) is used in this manner.

Ah, now I see the similarity. You're absolutely right.

As for the STA 6400 boxes in the secret NSA rooms grafted into telecom junctions all over the country, that's nothing new. For instance, in Washington state there is a satellite downlink station for our telephone network that AT&T maintains. Conveniently nearby is an ECHelon/GIANT listening post in Yakima. This has been operational for years and the amount of data collected about domestic calls is enormous. Internet traffic has been monitored by Carnivore for years, etc.

I talk to people in person about sensitive subjects, too. It's a wonderful feeling ;)

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Well what if it decides a certain street is completely empty but upon arriving you find out that there's an Amish convention in town?

I really think that both programmers AND the CEOs of these companies should be required to take the same ethics courses sociologists must take. As technology and society continue to blend, basic rights like privacy will be left by the wayside unless we take proactive action to prevent this.

When devices like this are released, instead of the main road having a 50-minute delay, with the back road having a 20-minute delay, all roads will be equally delayed. I personally don't care for it.

Yandex Maps app in has been doing this for a few months already, at least for bescov region.

NO NO NO! This is one step closer toward having us accept illegal tracking of us.

Soon it'll be used in courts to prove that someone WASNT at a crime scene (oops! already happening), then it'll be used to prove you WERE at a crime scene.

POLICE STATE on it's way with this sort of tracking!
Even disabling GPS won't be enough. Cannot find the link now but read recently a town in East coast US is using the Bluetooth signals to map traffic flow patterns. Currently in study, but expect it everywhere. Not sure if the user has to be actively paired to a headset or not.

Big brother may lose the RFID war, but something else (maybe this Bluetooth thing) will always be waiting in the wings. I hate this level of intrusion.

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Yandex.Probkri works like that in Russia for 2+ years. Extremely useful and popular service - and work on almost any smartphone with GPS. And yes - you'll have to sacrifice privacy to use certain technologies. But whole society is "un-private" place - total privacy possible/available only on uninhabited islands.

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To complete "Russian" picture of crowdsourced traffic monitoring - Probkovorot (or www.77.ru) is worth mentioning. It is another project on similar principles, working on winmobile smartphones and started over 2 years ago. Currently it has smaller number of participants compared with MM (hundreds per day according their own stats) covering around 500 km of roads daily (again project stats)
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