Nokia collaboration may keep you out of traffic jams

Traffic monitoring services like those available on GPS devices and Google Maps are useful, but they don't have much in the way of real-time tools for visualizing the flow of traffic. A new piece of mobile phone software, born from a partnership involving Nokia, NAVTEQ, and UC Berkeley, could provide the real-time information that these products lack.

By David Chartier | Last updated November 23, 2008 5:30 PM CT

GPS-enabled gadgets, from dedicated units to mobile phones, hold the promise of helping their users dodge bad traffic. Unfortunately, they're often hamstrung by the information backing them; many of the most popular traffic monitoring systems, including Google Maps, simply don't have sufficiently refined real-time traffic data. A new project, backed by Nokia, NAVTEQ, and UC Berkeley, hopes to alter this by making your mobile phone part of a two-way conversation about traffic conditions.

The collaboration, dubbed "Mobile Millennium" by the California Center for Innovative Transportation (where it is based), seeks to create a more useful traffic monitoring system using software that can be installed on a variety of Java-enabled consumer mobile phones, including various models from Nokia, BlackBerry, and other handset manufacturers. It anonymously collects data from these phones to create an early version of what will probably be the most accurate traffic monitoring system yet.

One of the few times I have needed a bad traffic report, and Chicago fails me

When it's running, the software displays a basic map on the phone using the typical color codes that denote different traffic speeds. It also allows a user to alert the system if, as often occurs with most current consumer traffic tools, the on-screen traffic conditions are not reflective of the gridlock that the user is currently stuck in.

The software, made available in a "pilot" version, can be downloaded for compatible phones by handing over some basic information at the Mobile Millennium site.

The Mobile Millennium project is certainly pacing itself, though, as the site indicates that this initial public testing period will extend for 18 months. The system was tested privately for the last six months, during which the tracking algorithms were refined in various experiments. As recently as July, 20 cars were driven on a specific looping route through downtown Berkeley, CA to test the project's urban tracking abilities. In August, the team expanded tests to the I-80 highway corridor that extends between San Francisco, CA and Lake Tahoe, NV.

Naturally, Mobile Millennium's early public testing has some significant limits. The project's FAQs, for example, note that traffic routes may not always align with map information due to both internal discrepancies and a desire to minimize the amount of data transferred to and from devices. Plus, due to the privacy rules that limit the sharing customers' GPS data by carriers, the software needs to be actively running on the phone for it to transmit the data that Mobile Millennium's developers need. And let's not forget that the mobile phone market is made up of quite a few phones that aren't from Nokia and RIM, though versions for other platforms that cannot run Java apps, such as Apple's iPhone, are on their way.

The project's site does not mention what will eventually become of this technology, and no one from Mobile Millennium responded to Ars Technica's request for comment in time for publication. The tech will likely be licensed or otherwise made
available to both the businesses sector. Companies like Microsoft and Inrix, a traffic information aggregator that reportedly powers the traffic products of Google (the search giant is strangely quiet on the topic), are undoubtedly interested in getting their hands on it.

Further Reading

- Found via New Scientist

Serving the technologist for $1.0775 \times 10^{-1}$ centuries