Berkeley, Calif.—It's a dilemma commuters often face when traffic grinds to a halt on the freeway: Should they stay on the road in hopes of quickly picking up speed or do they pull off in search of a better route.

Soon, they can look to their cell phones for advice in making the best decision.

Starting Monday, the University of California, Berkeley, will offer free downloads of a software program for phones equipped with a global positioning system as part of a pilot project called Mobile Millennium. Researchers say the technology will provide live traffic conditions, tell people how long their commute will take and help them avoid traffic by steering them to less congested roads.

They say the technology even has the potential to help people make travel plans in real time by coordinating a person's itinerary with current traffic conditions.

"If the phone knows where you are and where you're going, it can tell you when you should be leaving or else you're going to be late," said Alexandre Bayen, a civil engineering professor who is heading the project out of UC, Berkeley's, California Center for Innovative Technology. "People can see everything in real-time and plan their itineraries accordingly."

For the last few decades transportation officials have judged freeway traffic patterns by using cameras and sensors embedded in the pavement. Information from those sensors is transmitted to Web sites that feature color-coded maps indicating average freeway speeds.

But the sensors are expensive, so they're installed in only a few places. For the last few decades transportation officials have judged freeway traffic patterns by using cameras and sensors embedded in the pavement. Information from those sensors is transmitted to Web sites that feature color-coded maps indicating average freeway speeds.

That means traffic speed is not registered at every point on the road, making it hard to provide accurate, real-time traffic information.

As a result, commuters say what appears to be gridlock ahead is sometimes resolved by the time they arrive. At other times, bottlenecks materialize without warning.

Such limitations have led experts to believe that a better way to electronically measure traffic would be to put monitoring equipment inside vehicles and avoid traffic jams by steering them to less congested roads.

Researchers say such improvements are possible with GPS technology, but they say the sensors are expensive, so they're installed in only a few places.

But the sensors are expensive, so they're installed in only a few places. For the last few decades transportation officials have judged freeway traffic patterns by using cameras and sensors embedded in the pavement. Information from those sensors is transmitted to Web sites that feature color-coded maps indicating average freeway speeds.

But the sensors are expensive, so they're installed in only a few places. For the last few decades transportation officials have judged freeway traffic patterns by using cameras and sensors embedded in the pavement. Information from those sensors is transmitted to Web sites that feature color-coded maps indicating average freeway speeds.

But the sensors are expensive, so they're installed in only a few places. For the last few decades transportation officials have judged freeway traffic patterns by using cameras and sensors embedded in the pavement. Information from those sensors is transmitted to Web sites that feature color-coded maps indicating average freeway speeds.
software uses encryption techniques to protect privacy.

"We can't identify you, your cell phone number is stripped off, whatever data sent to us is encrypted," Bayen said.

The free software program is available nationwide to anyone with a GPS-equipped cell phone. For now, researchers are concentrating on getting up to 10,000 Northern Californians to download it so they can monitor traffic conditions on the major commuter corridors between the San Francisco Bay area and Sacramento.

They say the more people come online, the more traffic data will be collected, which will improve the system's accuracy. Also, it will help them get traffic conditions on city streets as drivers spread out across the network.

By assessing traffic conditions on those so-called surface streets, the system will also be able to suggest alternate routes when there's gridlock on the freeway. That in turn could lead to more efficient use of the freeway and roadway system.

"It's a very powerful thing if you think about it," Jacobson said. "Having potentially all the drivers out there contributing as a community to give you insight on traffic condition."

On the Net: http://traffic.berkeley.edu

Comments

We are pleased to let readers post comments about an article. Please increase the credibility of your post by including your full name and city in the body of your comment.

FAQ: Article commenting how-tos and tips

Recent Comments

Be the first to post a comment.

Post Your Comment

To post comments on article pages, please use a browser other than Chrome. With this browser, visit the Comments on the News section of our forums to read and add comments on articles.

Breaking News

Mountain lion seen running across San Mateo street
Web site: Spears' youngest son out of the hospital
Time magazine featuring Barack Obama is big seller
Aniston: Jolie was out of line about Pitt comments
Palo Alto council opts for new fountain, not work of art on California Avenue
Sources: Laura Bush looking into book deal
Obama girls on 'Hannah Montana'? Maybe just talk
Good Samaritan Hospital plan to close cardiac rehab program draws fire

Ads by Yahoo!

Cell Phone Spy Tools
Download software and Instantly Listen to Live Call, Read Text Msgs.
BigDaddySpy.com

Berkeley Accountants
Compare Accountants in Berkeley and get quotes.
www.matchpoint.com/accountants

Cell Phones to Philippines for Less
Send exciting Nokia and Motorola cell phones to your loved ones'
www.filgifts.com
Calif. program uses cell phones to unja...