So there you are in your car, needing to get across town as quickly as possible, and facing a gauntlet of traffic signals threatening to slow you down. Which route to take?

You could guess which way will be fastest. You could go the way you always go. Or, if you’re the owner of an iPhone, you could type your destination into a new application developed by a Eugene company and let it guide you on a route that promises to avoid red lights and get you there a little bit quicker.

The application — or app, in smartphone parlance — is called Green Driver, the creation of On Time Systems Inc., a company that up until now has made its money helping the Air Force and Navy do things more efficiently.

“We’ll make the world a better place,” said Matt Ginsberg, CEO of On Time Systems. “Everyone hates red lights.”

Green Driver uses real time data from the city’s traffic signal system in combination with global-positioning satellite technology to guide motorists to their destination. A map on the phone’s screen shows the route from Point A to Point B with the fewest red lights at that moment. If the signals change, the route changes. The idea is to get motorists to their destination as quickly as possible, saving time and gas.

Early benchmark testing shows that drivers using Green Drivers got to where they were going 3 percent faster than those who went on instinct. If that 3 percent savings in time equates to 3 percent less gas consumed, “that’s an unbelievable amount of gas,” Ginsberg said.

“It’s obviously a green project,” Ginsberg said. “Sitting at a traffic light is the worst thing you can do,” because your car is burning gas but it’s not going anywhere.
Green Driver began beta testing last week in Eugene, with 40 select iPhone users trying the system, reporting bugs and problems and offering suggestions for improvements. Ginsberg hopes to make the program available on Apple’s App Store sometime this summer, depending on how the beta testing goes. Versions of Green Driver for other smartphones are expected to follow as quickly as they can be developed, Ginsberg said.

Apps are small software programs that users of iPhones and other so-called smartphones, such as the Motorola Droid, Google Nexus One and Palm Pre, download onto their devices for utility and for fun. Popular apps include games, maps, news, health and travel. Apple says its App Store has more than 150,000 apps.

Mobile apps are big business: Last year, smartphone owners spent about $4.2 billion downloading more than 2.5 billion apps, and analysts predict that the apps market will reach $30 billion by 2013, according PC World.

While many apps cost 99 cents and up, the Green Driver app will be a free download. Green Driver will make its money by taking the traffic data it collects, turning it into traffic studies, and selling those studies to municipalities and developers who require such information when planning road systems and new development. The data will be stripped of any identifying information so no one can tell where and how individual users are driving, he said.

“All we want is aggregate data so we can do traffic studies,” he said.

Ginsberg said it’s possible he’s misjudged the value of the traffic data that Green Driver will generate, but early indications are the information will be in demand.

“The people we’ve shown it to, everybody wants it,” he said. “This can change the way people do (traffic studies). It looks like the business model is a slam dunk.”

Other cities and regions, including Portland and south Florida, have inquired about getting Green Driver for their streets, he said.

Steve Outing, director of the Digital Media Test Kitchen at the University of Colorado, said Green Driver’s business model — making money off the data provided by users — is “a fairly innovative one.”

“We’ll probably see more of that,” he said. “A lot of these apps are collecting an awful lot of data.”

Because Eugene is the pilot city, its traffic engineers will receive Green Driver’s traffic studies for free, Ginsberg said.

Tom Hansen, the city of Eugene’s traffic engineer, said that as a motorist, he doubts he would use Green Driver in his own car, much less a regular GPS unit. But as a traffic
engineer, he’s very interested in the information the app will provide about Eugene motorists’ driving habits.

“We love data,” he said. “It should be real useful in learning what routes people are driving.”

On Time Systems was founded in 1998 by Ginsberg and David Etherington, who spun it off from the University of Oregon’s Computational Intelligence Research Laboratory. The company specializes in developing optimization software — computer programs that use step-by-step problem-solving procedures called algorithms — to figure out the best solution for a problem out of trillions of possibilities.

The company’s clients include the U.S. Air Force, for which it has developed a fuel-saving program for noncombat flights, and the U.S. Navy, for which it has written a program that schedules shipbuilding work.

Ginsberg set up Green Driver as a separate company, which contracts with On Time Systems for data and software development. To capitalize the new company, On Time Systems issued a dividend and gave shareholders the option of investing the dividend in Green Driver; 99.5 percent of the dividends were invested in Green Driver, he said.

He declined to say how much has been invested but added that he hopes it will be sufficient to avoid going to the venture capital markets. He said rolling out Green Driver to other markets should not require a major investment.

“A city is a city. A traffic light is a traffic light.”

Ginsberg said it’s too early to tell how big Green Driver will become.

“Will it take off? It could,” he said. “It’s easily managed. The revenue has the potential to generate more revenue than our Air Force contract.”

He knows there will be concerns that Green Driver will cause drivers to be distracted from the task at hand, but said the program has been designed to minimize distractions. He said people use GPS units in their cars all the time without apparent problems.

“We have worked hard to make it safe,” he said. “It’s not a distraction — it’s a glance. It doesn’t talk to you. If the route changes, it bings.”

In fact, Ginsberg maintains that it encourages motorists to drive more slowly. The interface includes a speedometer that turns red when a motorist drives over the speed limit.

“In five years, this is just going to be how people drive,” he said. “The data’s available. There’s no reason to drive a route that’s stupid.”
“In five years, this is just going to be how people drive.”

— MATT GINSBERG, ON TIME SYSTEMS