

**Traffic Apps Accelerate**  
**By Monica Allevan**  
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**Navigation services that use location-based services (LBS) are more mainstream than ever.**

For people like Sal Dhanani, TeleNav's co-founder and senior director of marketing, it's been a long time coming. He and co-founders H.P. Jin, Bob Rennard and Y.C. Chao quit their high-paying jobs to pursue their dream back in 1999. But 9/11 and the bubble burst forced them to lay off dozens of employees, and at one point, they were down to just nine people before they got their first big break with Nextel Communications.

Today, TeleNav services are available through most major carriers, and TeleNav boasts that it has been the No. 1 third-party app since 2004. Traffic is integrated into navigation, and rerouting is available so commuters can find the next best route to take if their usual route is congested. Consumers can even find the nearest gas station with the lowest prices.

The market is still in the early stages, though. A lot of enterprises have been using LBS for field force applications, and social networks, like that offered through Boost Mobile and its deal with loopt, are incorporating location. Those developments, combined with easier-to-use devices, applications and carrier uptake, are driving the market for traffic services. "Right now we're at the tipping point of this," says Sean Ryan, research analyst at IDC. "It's still very new, and this is going to grow. We're starting to make that move toward critical mass."

Navigation was limited in the early days with just one main carrier, Sprint, fostering it. With Verizon Wireless on board and GSM carriers starting to get GPS-capable devices, the space has the potential to get more backing from GSM carriers in Western Europe, Ryan notes. He expects the industry will reach a point when chipsets come down to a price point such that GPS is as common in phones as Bluetooth.

"It's an evolutionary step for the carriers to offer traffic," says Gartner analyst Thilo Koslowski. "Ultimately, I believe everybody will offer traffic information." The next step will be in how carriers differentiate their offerings. And just because a driver is getting traffic information, even in real time, doesn't mean he or she is better off in getting to a destination, he adds. There are times of the day when no better options exist, and the best thing a user might get is advice to leave the office a half hour earlier or later. Then the traffic information becomes a time management tool.



**Alternate routes are suggested when congestion is ahead.**



**3rd Dimension's application plays a BMW ad while the traffic video queues.**

**THE SOURCES**

To get real-time traffic information, application providers like TeleNav turn to the likes of Inrix, a Seattle company originally spun out of Microsoft Research with the exclusive intellectual property (IP) rights that allowed it to quickly ramp up its offerings. The company's founders are former Microsoft executives who originally wanted a better way to get around congested Seattle traffic by getting access to information via cell phone, according to Scott Sedlik, vice president of marketing at Inrix. It didn't hurt that one of Microsoft Chairman Bill Gates' early companies was Traf-O-Data, which developed a counter to record traffic flow.

Inrix aggregates traffic from various government departments of transportation (DOT) using sensors underneath and on the sides of roads, in addition to using a GPS vehicle probe network that involves more than 625,000 taxis, local delivery vehicles and long-haul trucks. With that real-time information, the company is able to use its IP and data about location, speed and other information to intelligently figure out traffic conditions, Sedlik says. In some cases, the company is exchanging data with the mobile resource management (MRM) companies; at other times, it pays for the data. Inrix also uses predictive analytics, called Bayesian analysis, to measure traffic based in part on historical data.

The importance of historical traffic data often is underestimated, says Darrin Wilkey, senior manager/wireless at Tele Atlas, which uses Inrix data. However, it's a useful tool for planning routes and can lead to better decision-making. Says Al Cooley, senior director, tools and services at Tele Atlas: "It's like having an experienced taxi cab driver during rush hour that knows the traffic flow by day of week and hour of the day based on his collection of data over years of driving a city."

Another traffic data supplier is Atlanta-based AirSage, which is using the very cell phones that users are carrying in their cars to get traffic information. AirSage has a long-term contract with Sprint to access the signaling data from more than 50 million subscribers in an aggregated format, augmented with

information from incident trackers to determine where accidents occur, says Tom Bouwer, vice

president of sales and marketing at AirSage. Basically, AirSage takes a series of data points and runs those through several hundred algorithms in less than a minute to get real-time traffic information, he says. AirSage also has a deal with outfits like Clear Channel to provide information on why a particular area is congested. "Most providers of traffic information today have to act as aggregators," taking pieces from here and there because there is no single source of traffic data, he explains.

Still another way of obtaining information on current traffic conditions is through cameras situated on roadways. That's what New York-based 3rd Dimension is doing, although COO Bruce Laskin says it's not meant as a traffic information service replacement but more of a complement. He describes it as a "light" application that an end-user can download to a mobile device for free to see what's happening on roadways in and around New York City. While the video is buffering, the user sees a short ad for BMW. The service requires that 3rd Dimension, which plans to launch in 49 other U.S. markets, strike agreements with multiple local and state government traffic entities, and its business model includes pacts with media companies, such as WCBS, a radio station in New York with an emphasis on frequent traffic updates.

### CONSUMER AWARENESS

Interestingly, as consumers learn more about navigation services, they're asking for more. "Traffic is the single one feature that ranks the highest whenever anyone is asked about a navigation system," AirSage's Bower says. Apps providers can spend hours trying to inform consumers about what they can do with their phones, but "there's nothing like showing it to them," Laskin says. "You can talk for hours and days, but I have never seen any of that land in people's heads the way you see the sparkle in their eyes" when they see the traffic cameras showing their daily commute. The system was designed for traffic, but people have found the cameras useful to see weather conditions or, in the case of a Dallas couple last year, watch the Macy's Thanksgiving Day parade.

While privacy advocates may be quick to jump on the use of location information, AirSage says its patented technology ensures no proprietary, customer-identifying data is accessed or released from the carrier's secure environment. "Privacy is obviously a great concern for us and it's also a concern for the carriers, and the carriers will never do anything that will jeopardize their primary revenue stream," Bower says.

For years, navigation has been seen as a stand-alone application, where the user enters an address and will be guided there. Now, navigation is becoming a vital ingredient with other apps like search, notes Marc Prioleau, vice president of marketing at deCarta. The company's software is designed to allow application developers the chance to create apps that incorporate traffic and use it in ways that are most relevant. One of deCarta's big thrusts is to not only give information that a 2-car accident occurred up ahead, but also provide an alternate route.

If knowing about accidents on the road ahead and alternate routes are not enough, TechnoCom is working on technology to avoid collisions altogether. The concept calls for eventually deploying technology at some 250,000 intersections across the country, says Justin McNew, director of mobility solutions at TechnoCom. The company is in the process of deploying a proof of concept to go live in the Detroit area later this year. The hope is that auto makers will include sensors in cars that will communicate with each other and installations along roads about speed and traffic conditions and ultimately avoid accidents through things like automatic braking. Auto OEMs are looking at the 2011-2012 timeframe for it to be included in new vehicles.



**TeleNav turned to companies like Inrix to get real-time traffic information.**



**Prioleau: Navigation apps blend well with search.**