

# Cell phone signals offer massive trove of travel data

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Every hour of every day cell phones are generating data which transportation planners, real estate developers and investors use to help them to understand traffic flows, shopping patterns and population shifts.

An Atlanta-based company, AirSage, collects real-time data (15 billion data points every day) from [cell phone](#) tower interactions - whenever a person sends a text, makes a phone call or when a phone is searching for the next cell phone tower.

AirSage was one of the exhibitors at the annual Transportation Research Board meeting in Washington this week.

The company draws the data, which come from more than 100 million mobile devices, from two of the top three [cell phone providers](#). The data cover more than a third of the U.S. population.

AirSage strips off personal data - "We don't know its Tom's phone," said Andrea Moe, AirSage's vice president of product management and marketing, "but we know it's a device and it has a unique identifier." She said the company does not look at individual devices but at large aggregations of data from many devices.

Moe said 75 percent of AirSage's business in the transportation realm is with engineering and consulting firms like Parsons Brinckerhoff, and about 25 percent of its transportation business is with municipalities,

metropolitan planning organizations and departments of transportation.

In contrast with older traffic study methods, she said, "we're providing faster data because we can just reach in and grab a stream of data any time from yesterday back to 2009."

Traffic planners, developers, and investors can use the data to figure out questions such as how many people who live in an affluent suburb are flocking to the new mall 15 miles away, and whether they're avoiding an older, un-trendy rival mall.

The data can track travelers on buses and in van pools, as well as pedestrians and bikers, as long as they carry their cell phone or other mobile device with them.

Last year for the NCAA Final Four, the Dallas Convention and Visitors Bureau wanted to understand not only where fans were coming from to attend the basketball tournament, but how long they stayed in Dallas and whether they stopped at malls and other points of interest.

Because AirSage knows the home (or where the device seems to call home and sleeps on a daily basis) and its Census Block Group, it can infer demographic information (such as [average household income](#)) about the devices' owners.

Census Block Groups generally contain 600 to 3,000 people. There are roughly 220,000 block groups nationwide.

Five years ago, this data analysis couldn't have been done. AirSage turned on the first [cell phone company data](#) stream in 2009 and the second one in 2012.

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