A new way to navigate the city

A small team of scientists from MIT is using Rome as an urban laboratory to devise a new technology to help us get from here to there. Megan Williams reports.

**TEXT OF STORY**

**BOB MOON:** Few cities in the world are as haltingly beautiful as Rome. Halting, as in tourists brought to a standstill every few feet by another breath-taking site, traffic that inches along and seemingly endless lines. In this case, even the Romans would prefer not to do as the Romans do. Which explains why a small team of scientists from MIT is using Rome as an urban laboratory.

Megan Williams reports on the new technology of getting from here to there.

**MEGAN WILLIAMS:** They're developing a new mapping system that creates, and relays up-to-the-second information about everything that slows you down, whether you're on foot, on a bus or in a car.

I meet up with Carlo Ratti, an MIT real-time map designer, near the Spanish Steps. The area's packed with tourists.

**CARLO RATTI:** You know the idea is how really to get information about the city, and give it back to the citizens, to everybody, to the Romans, to the tourists, and in the end help make the city work in a better way.

The mapping technology tracks concentrations of cell phone and GPS signals. Then it shows colored lights on a map representing crowds and traffic jams -- the city in motion. The goal is to have the live, constantly-changing maps available at bus and subway stations, over the internet and even on cell phones. Not just to avoid crowds, but to suss out hot spots.

**WILLIAMS:** So say you and I are going for a walk one night. We want to get to a happening bar. We want to avoid the crowds up ahead at Piazza di Spagna. So just what would you do? I mean, what does it look like using this technology?

**RATTI:** Say you get it from your cell phone. So then that night, we'd just be looking at the cell phone. Look at say the most crowded place for going to get an aperitivo, and we'll see it here on the map and we'll also see the fastest way to reach it.

The technology could cut back on wasted time, time that could be used working or shopping. It could also
bring huge energy savings

**KRISTIAN KLOECKL:** And in red, it shows again the cell phone activity . . .

Kristian Kloeckl works with Ratti at MIT. Up on his computer screen is a live map of Rome they made of a recent all-night city-wide festival. Pulsating dots of yellow show crowds on foot. Streaks of orange are buses edging down avenues. Kloeckl says the information can help city planners make public transport a lot more efficient and cost effective.

**KLOECKL:** One is to use it for planning purposes, planning new urban mobility routes around the dynamic of people flow within the city. The other consideration is making use of this in a more flexible way of considering bus routes that can actually follow the flow of people.

And that's good news for Paolo Zocchi from Italy's ministry of Regional Affairs. He wants to use the live map to help make Rome's clogged and clunky public transit system smooth.

**PAOLO ZOCCHI:** Of course you have some basic information. When my bus will arrive. But you can also have some deep information. How many people are in the bus, for example? And if the bus is with air conditioning or not, or how much time I employ to arrive from one point to another in the city.

Zocchi says with its urban crowding and chronic traffic jams, Rome needs this kind of help. The technology's almost there, he says, but it's also getting people to respond to it.

**ZOCCHI:** I think that the Italian government is convinced to invest. I think that the big issue is to convince also the citizen and to inform the citizen can have a very high added-value for his life.

In the meantime Lisbon, Copenhagen and even the Scottish Highlands have come on board to develop their own maps. As for when exactly the new systems will be just a click away? Well, Rome wasn't built in a day.

In Rome, I'm Megan Williams for Marketplace.