

[Chicago's chief technology officer has vision of Digital Second City](#)

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John Tolva, Chicago's new tech guru, wants Chicago to become known as the Digital Second City.

"Forget thinking about computers or even websites. We want to think of the city itself as a platform for interaction — as a computing platform," said Tolva, 38, the city's new chief technology officer and a fourth-generation Chicagoan who previously worked as IBM's director of citizenship and technology.

In the short run, a digital Chicago could enable people to receive city services faster, see how efficiently a government agency is working or receive wirelessly and in real time a variety of transit options for running an errand.

In the long term, Tolva wants to leverage "open data" to create new markets, businesses and on-the-fly networking opportunities.

"There are makers, builders and developers who see the city as a new domain, as a new problem set," he said. "How might we become as digitally literate a place as we are architecturally literate?"

Tolva also wants to build on Chicago's "Digital Excellence" plan, which focuses on providing high-speed computer access, local online content and affordable computer software, hardware, education and awareness to underserved neighborhoods.

One effort will map the city's available broadband and fiber-optics capacity in order to fill in the gaps.

"You cannot manage something that you're not measuring," Tolva said. "The city has been publishing data for quite some time. We're about to put that into overdrive."

Tolva is the latest public official to talk about leveraging "open data," or what has become known as Gov 2.0.

Leon Rockingham, the mayor of suburban North Chicago, hopes to use data on MetroPulseChicago.org to see how his community's progress compares with its neighbors and ultimately, to develop a vacant brownfield site next to the Great Lakes Naval Station.

The city plans to develop the 40-acre site, called Sheridan Crossing, into a destination, with a hotel, restaurants and retail stores that would serve as an entertainment stopover for sailors and their families.

"The Naval Station graduates 500 to 1,000 recruits each Friday, and we hope to serve as a place where they and their families can stay and be entertained," Rockingham said.

Governments are developing new software tools so they, researchers and the public can more quickly find and use data on anything from the local air quality to the community's unemployment rate.

Rich Schultz, an associate professor of geography and geosciences at Elmhurst College, said today's easy access to online data has led people to want instant gratification — including quick responses from government.

"If a street light is out, people running around with iPhones, BlackBerries and other mobile devices can report it immediately. The bar gets raised," said Schultz, who coordinates Elmhurst College's certificate program for the Geographic Information System (GIS), which ties data into visualization systems. "It's all about mobile computing, location-based data and getting good-quality data."

The Chicago Metropolitan Agency for Planning, or CMAP, partnered with the Chicago Community Trust to create MetroPulseChicago.org, which lets people see data as a map, a chart, a table or other visual element to quickly assess a situation.

"Until now, it has been difficult to quantify," said Greg Sanders, CMAP's information architect. "The data are worthless if no one understands what they are looking at. The visualization tool lets people quickly get a handle on the data."

Two Chicago Web-development firms — Pathfinder Development and Great Arc Technologies — helped set up the system that aggregated 20,000 data tables.

The system relies on software developed by Information Builders, a New York-based business intelligence company that employs 40 at its Downers Grove office. The software brings the data together quickly.

Chicago's Tolva says historic institutions and innovations — of which Chicago boasts plenty — form the perfect basis for innovation.

"We turned from wheat to pigs to commodities to the futures market, and that gave rise to a nationwide rail network," he said. "We should look at what has made us great in the past and try to translate that to tech startups."