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How Geeks Get Us Around Town

Transit-app developers are proving Orwell wrong.

By Julia Vitullo-Martin
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At a software developers "unconference" in New York Wednesday night, Jay Walder, the chairman of the Metropolitan Transportation Authority, sent a radical message to the young people in front of him. They had been agitating for ages to get access to real-time MTA data about subways, buses, bridge-and-tunnel traffic and the like.

Mr. Walder did not disappoint them. If the MTA can "harness the power in this room," he said to his audience, "we'll be a heck of a lot better off than if we're doing this ourselves."

Thus New Yorkers will soon join the residents of hip young cities like Portland, San Francisco, Chicago and Boston, who no longer wait in wretched ignorance for the next bus or train to arrive. Their public transit systems, once the hoariest and most hidebound of city services, have thrown themselves into the geek revolution. Instead of keeping secret their raw data on everything from which subway stops have working elevators to service alerts warning about construction or other delays, they made it all public.

In no time at all, an explosion of independent entrepreneurs figured out how to give people the information they need to navigate their trips happily. This is our new non-Orwellian universe in which technology can set us free.

Chris Dempsey, the 27-year-old director of innovation for the Massachusetts Department of Transportation in Boston says MassDOT took as its model the National Weather Service, which puts out raw data every morning. Professional weathermen, amateur forecasters, citizens, school districts—anybody can use the information however they like.

In November 2009, MassDOT made public a raw transit-data feed for five bus lines. Boston-area app developers pounced. Within an hour of the release, says Mr. Dempsey, someone had mapped the data on Google Earth to show the real-time location of buses. Within two days, a developer

set up a simple, free website on Google Maps, where riders can track buses from any Internet-linked computer.

Within a week, a developer built a desktop application that displays the countdown to arrival time for the rider's favorite stop. A developer built iPhone and Android apps that integrate real-time bus and train data. Someone else introduced a 617 phone system for any technologically challenged Bostonians who lack BlackBerrys or Androids.

J.P. Licks, an ice-cream store and cafe located at the midpoint of Boston's most crowded bus line, installed a digital countdown sign so that customers know how much time they have to eat and shop. The sign is part of a project called Lost in Boston that is using the Massachusetts Bay Transportation Authority's real-time bus data to help tourists and locals get around neighborhoods. What a leap from a few years back, when the MBTA sued MIT students to prevent them from releasing fare-card data (which they had hacked) to the public.

It's all proof that George Orwell had it backwards in his novel "1984," when he depicted electronic technology as a means of facilitating totalitarian mind control. Far from enhancing the power of a centralized state, advances in technology have had the opposite effect, producing democratization and devolution to the individual.

The fax machine helped dethrone the Soviet Union, after all. More recently, Twitter has made pro-democracy demonstrations in Iran and China possible by letting protestors communicate—and it is now undermining (and may topple) the U.K.'s notorious gag-order libel laws.

It's no accident that the geek transit revolution started in flexible, brash young cities on the West Coast—primarily San Francisco and Portland. "We're much more about open government in Oregon than in the East," says Carolyn Young, executive director of communications and technology for Portland's TriMet transit system. "We combine technology and innovation. We get our data right. We have the precise arrival times, for example, for every one of our 7,000 bus stops."

Transit agencies often cite concerns about the accuracy of data when they are resisting its release. "I get asked a lot: 'What if someone uses your data in the wrong manner and bad information gets out there?'" says Bibiana McHugh, a TriMet IT manager. "But riders were already getting bad information. They were screen-scraping the data off our website."

New Yorkers are among the screen scrapers. At the moment they have virtually no official information about bus arrivals and only a little bit about trains. Their system, overseen by the

MTA, is immense—11 million passengers riding 6,380 subway cars and 4,600 buses daily—dwarfing every other system in the country.

The geek community is hopeful that the concept of transit-data democracy has arrived. Software engineer Nicholas Bergson-Shilcock says this is largely because Mr. Walder is "imposing an institutional commitment" to release data in manageable form. Benjamin Fried, who edits the online newspaper Streetsblog, sees a clear path from there: "Then the developers will respond and you'll have all the apps that you need organizing the information so that riders can use it."

Once developers provide apps—one called Exit Strategy tells riders which subway car to choose in order to link up with a station exit—we can all download them to make our way around New York. Of course, along with the old issue of bureaucratic control of proprietary data there's another: Why shouldn't developers have to pay for the data? Ms. McHugh has been asked that before. "This is public information," she always answers. "The taxpayers have already paid."

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