

New GIS-based mobile and Web applications are enabling citizens to report concerns, opinions, and requests directly to the government.

AS GOVERNMENTS increasingly develop Gov 2.0 initiatives, they are better able to answer the call to do more with less and meet citizens' desire to connect with government. Geographic Information System (GIS) technology is evolving with this movement as it naturally facilitates communication about place-based issues.

Acknowledging citizens as powerful sources of data, smart cities are providing ways for

them to deliver real-time comments to government. A smart city might have cameras mounted on traffic signals, smart meters on utilities, and other data collection systems providing city leaders with vast amounts of data that allows them to make better decisions. With the right tools in place, smart cities are making citizens a part of the sensor network. New GIS-based mobile and Web applications are enabling citizens to report concerns, opinions, and requests directly to the government. They can quickly and easily send photos and other information from their smartphones or computers to government agencies to report issues, and the data can be automatically tied in to a GIS.

Philly311 is Philadelphia, Pennsylvania's system for citizen contact with government. The city is making it easy to access Philly311 via a free iPhone application.

With it, citizens will be able to report and track problems from their iPhones.

Casting a wider net for citizen input, beyond traditional meetings that only attract small portions of the population, GIS-based applications are helping government know what's happening on the ground across a community.

GIS organizes information and communicates it instantly to all parties who have an interest. And because it enables in-depth data analysis, GIS helps agencies do something meaningful with the data they collect from citizens—improve processes, work more efficiently, and provide better services.

Esri has been streamlining government work for decades. With today's tools, government can pull citizen-generated data directly into existing systems, making them more accurate. It's an unprecedented opportunity to get a clearer picture of what's happening on the streets and in neighborhoods and share that data with the public via GIS. The government's response, too, can be displayed for

everyone. GIS enables this new citizen-assensor model, leading to more accountable and transparent government.

A Modern Approach

As citizen-generated data can become part of the government workflow, operations can move faster than ever. A citizen can instantly report a broken streetlight or graffiti, for example, from their smartphone at the scene. That can automatically

real-time platform for citizen engagement in Glendale, California, and other cities. Customized Web and mobile apps help citizens report problems and save time and money for government to respond to those problems.

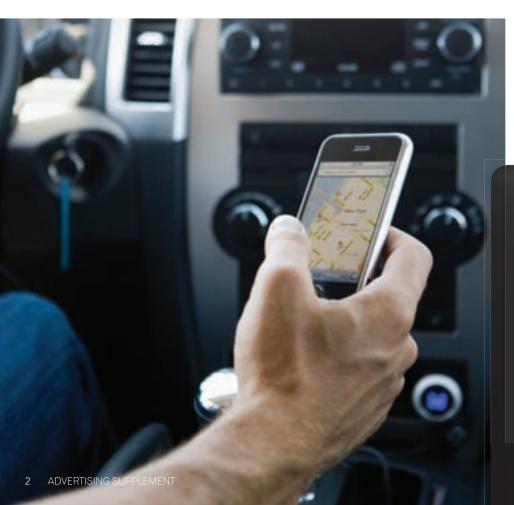
The process is much more convenient for the public now. The rise of GIS-based mobile and Web applications is allowing government to go further in engaging citizens than with traditional means. Previ-

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start the work order process, so a needed repair can be made much more quickly than in the old days, when citizens had to call city hall and wait to see whether anything happened.

Private-sector companies like City-Sourced are tailoring solutions to fit into GIS workflows. CitySourced provides a ously, if citizens saw a broken sidewalk or a tree branch needing to be cut, they'd often have to wait until a convenient time to make what could be a long call to the city or send an e-mail to report the details. Now citizens can simply click on a map and enter the details of a complaint or service request.

Government wants citizens to be involved, and citizens can now participate more easily than ever with GIS. With constant improvements in the way data is analyzed and spatially displayed, GIS has been ready for a long time. Now government is ready too.



Explore GIS

who want to create GIS-based solutions will find helpful information in the Esri Resource Centers (www.esri.com/resourcecenters). Visit the site to find documentation, samples, content, blogs, and other tools. There are also discussion forums so users can connect with one another and share tips and tricks for success.

Governments and developers



lendale, California, is thinking ahead. The city of more than 200,000 residents near Los Angeles is using GIS in creative ways—always aiming to provide better services for its citizens. In September 2010, Glendale unveiled a new service that lets people report problems to the city via smartphones. Citizens can also track progress on their phones as the city responds to reported issues. GIS from Esri lets everyone see the status on easy-to-read online maps.

Glendale's vision for improving citizen engagement and service included GIS as a critical component. The city wanted to extend existing GIS implementations and make sure that the information collected from citizens would easily integrate with GIS-based workflows and business processes. With the new application, residents can report problems and attach photos while the application itself records the location. There's also a quick and easy way to categorize the problem before sending it. GIS helps the city analyze the data and observe trends.

"Citizens are not only asking for services, but they are also contributing to knowing and

understanding what's happening in the community. A lot of the social networking is going to be heading in that direction," said Ed Fraga, Director of Information Services for the city.

Glendale has used GIS from Esri for many years. It's a huge part of the city's efforts to include more data from citizens. Data submitted by citizens is added to the city's own databases. "We have an end-to-end interaction between what the citizen captures and reports and the city's ability to take that data and get it to the right department, the right staff, and get

a resolution. And then we report back to the person who initiated the request," Fraga said.

To provide the application itself, Glendale chose CitySourced, a company based in Sherman Oaks, California. Like Glendale, CitySourced uses Esri for its GIS platform. Because CitySourced can link citizens to a government agency's own systems, citizens can

trust the information they get in return. "We thought that kind of closed loop was important, and CitySourced provides that," said Fraga.

The system will be even more robust in the future, with GIS helping the city share more data. For example, a message from a citizen about a broken light pole will automatically bring up the equipment number, model, location, what it's connected to, inventory status, and more.

The smartphone system is part of Glendale's effort to be a smart city. Glendale is already a leader in smart grid development, and it's also practicing information-based policing, where GIS helps with spatial analytics. "That kind of policing is emerging because of our heavy use of GIS," Fraga said. "So that's another area we're moving forward in, and we're finding pretty good success in that now."

The city also plans to push more information out to citizens. "We've named our service request system *My Glendale*," said Fraga. "We're trying to move in the direction of personalized public data or city data."

Glendale plans to increase its use of technology in order to get things done. "I firmly believe that one leverage point that cities have, in terms of lowering their costs, is information systems," Fraga said. "Labor is always going up; in most big cities, it's between 70 and 80 percent of the annual budget. So anything you can do to make that labor more efficient, that's where you save money."







To learn more about how GIS enables better citizen engagement, visit www.esri.com/PCIO1010