Phoenix Website Helps Visually Impaired Residents

Sarah Rich | September 18, 2012

Government websites are often used for finding the locations of municipal buildings, health clinics and city parks. But for those who don't read with their eyes, browsing a computer screen can be nearly impossible. To assist the blind and visually impaired community with this, Phoenix's Street Transportation and IT departments launched a new website that works with technology to read the text out loud to users.

The website — launched in August — lists the locations of all the accessible pedestrian street signals within the city and features audio files of the different sound signals used for pedestrians at crosswalks, so individuals can identify which sound means what.

At first glance, the site may look like a practical list of addresses outlining where the pedestrian signals are located in the city, but with the use of "assistive technology" — a device with voice capability for reading website text, such as newer models of the iPhone — information from the website can be read aloud to the user.

Doug Kirkman, the principal engineering tech for the Street Transportation Department, said the pedestrian signals website was the first of Phoenix's government services websites to be designed specifically to meet the needs of the visually impaired community.

"The blind and visually impaired community relies almost exclusively on public transportation for their mobility to get to shopping and employment," Kirkman said. "They rely on the accessible pedestrian signals to make crossings at signalized intersections."

Before the site's launch, the information on pedestrian signal locations didn't exist on any city of Phoenix website. After gaining feedback from citizen requests, the city worked with the Arizona Center for the Blind and Visually Impaired to help develop the site's content, and created the website without assistance from a third-party vendor.

Though Phoenix designed its accessible pedestrian signals website in response to community need, state and local government website accessibility to individuals with disabilities is required under the Americans with Disabilities Act and for government entities that receive federal funding, the Rehabilitation Act of 1973, according to the [U.S. Department of Justice](#).

The two laws "generally require that state and local governments provide qualified individuals with disabilities equal access to their programs, services or activities unless doing so would fundamentally alter the nature of their programs, services or activities or would impose an undue burden," according to the Justice Department. "One way to help meet these requirements is to ensure that government websites have accessible features for people with disabilities."

Despite the reasoning, the Phoenix Street Transportation and IT departments have fulfilled a need with the pedestrian signals website, on which there are two viewing settings: a tabular/list view and table/grid view.

When accessing the site in table/grid view, before any mention of street name, is "East-West Street" or "North-South Street." This way, when users scroll down the page and get several addresses down, they will still be reminded of which direction the street runs.

"The table [view] was actually constructed using HTML so that it reads logically each row left to right," said Ben Winton, an IT analyst for the city. "If it encounters a hyperlink, assistive technology will tell the users and [tell them] to click on it if they want more information."

Because the website was designed using HTML coding, specifically allowing for assistive devices to read content from the site out loud, visually impaired users don't need to rely on family or caregivers to read the content to them. To utilize this functionality, individuals accessing the website via an iPhone must go to the settings icon to enable a feature that makes the phone read everything that it runs across out loud to the user, Winton said.

"One of our testers who is blind uses an iPhone with the screen turned off," Winton said. "She's turned on assistive technology in her iPhone so that the words are read aloud to her."

Conversation starter: How should government websites change to meet the needs of individuals with disabilities? Share your thoughts in the comment section below.

http://www.govtech.com/e-government/Phoenix-Website-Helps-Visually-Impaired-Citizens.html