

City of New Orleans—Outbreak Surveillance and Control

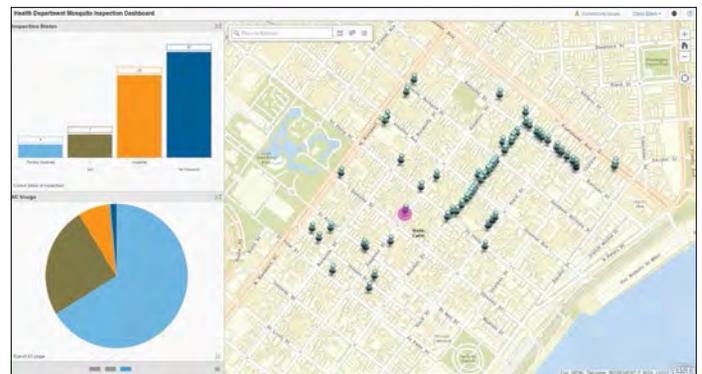
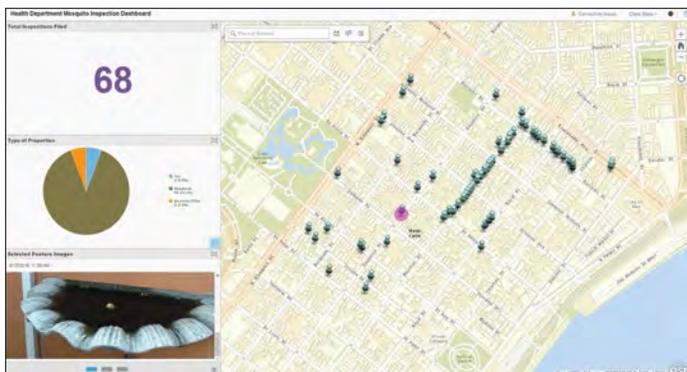
The City of New Orleans, Louisiana (NOLA), enlisted Esri partner GISinc to develop a more efficient data collection process that fieldworkers could use to help the city prevent a Zika virus outbreak. As part of taking on a task this large, NOLA recruited 183 health corps volunteers to inspect all properties in the city, looking for risk factors pertaining to the presence of adult mosquitos and larvae such as containers, standing water, and abandoned tires. During the business process review, the team from GISinc identified how the completely paper-based method to be used by volunteers would require duplicate data entry when consolidating inspections. This manual process would cost valuable time and delay the results being communicated to departments such as mosquito control, code enforcement, and sanitation.

NOLA, having Esri's ArcGIS Online platform, had access to hundreds of ready-to-go apps. GISinc worked with the city to configure two of these apps: Collector for ArcGIS, for conducting field risk inspections, and Operations Dashboard for ArcGIS for disseminating results to key decision-makers and department leads. Within two weeks, after three test runs and feedback cycles, the city had production-ready solutions prepared for the health corps volunteers. As the volunteers' inspections are completed in the field, results are disseminated in real time on an operational dashboard.

What makes this outbreak surveillance and control solution remarkable is that the configurable apps can be repurposed to combat all vector-borne diseases. It is Zika virus today, but the concept applies to dengue, chikungunya, West Nile, and other viruses.

The City of New Orleans now has the ability to make decisions based on constant, real-time data and is able to share information with people who need it immediately.

↓ The Inspection Dashboard displays a count of field inspections and a pie chart showing the types of properties inspected in the current map view, and also images taken during the select inspection record. This data updates automatically as inspections are conducted.



↑ Dashboard viewers can click on the bars for each status type and highlight the inspections with their current status. One particular piece of information collected was whether a property was using air conditioning and if so, the type of air conditioning being used.

What's Next for New Orleans and GISinc?

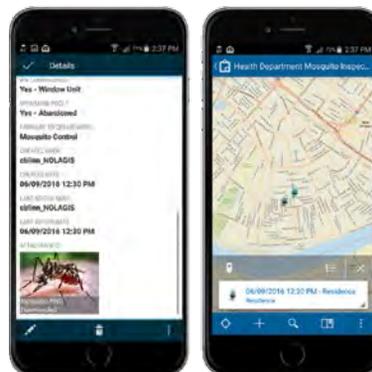
GISinc is currently finalizing its business process report, which has identified multiple Esri ArcGIS Online information products to support all aspects of the city's Zika virus response plan. This includes solutions for surveillance and monitoring activities, control and treatment, and outreach and education.

Location technology can help. The power of visualizing information on a map leads to location-based decision-making.

What the City of New Orleans Is Using for Outbreak Surveillance and Control

- Data services—Data layer creation
- Web map creation—Collector app
- ArcGIS Online applications—Operations Dashboard
- Video instruction and knowledge transfer

To learn more about the work the City of New Orleans and GISinc are doing together, contact Kevin Stewart, GISinc managing partner, State & Local Governments at kevin.stewart@gisinc.com.



← Field crews took advantage of ArcGIS Online technology and the Collector for ArcGIS mobile application to conduct the inspection process throughout the city. The image shows the types of information being collected and how users can easily add items such as pictures taken from their mobile device.