

# Leveraging GIS in the Fight against COVID-19

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We would be remiss if we did not address the coronavirus pandemic as our feature article for the first digital IMAGINews since 2013. The IMAGINews newsletter is provided as a member benefit whether in paper or electronic format. Since the pandemic has altered many of the ways we communicate with each other, the IMAGIN Board decided to begin a fresh IMAGINews experience. Please drop a line to the [IMAGIN Communications Team](#) about the format, content and ideas you have for future digital IMAGINews editions.

As presented at the annual Esri User Conference, GIS has become one of the technologies people rely on to view the various aspects of the current novel coronavirus situation along with historical trends. By connecting people with maps, the detailed health data and statistics become easier to understand. One of the premier COVID-19 dashboards was created at the beginning of the pandemic by the [Center for Systems Science and Engineering \(CSSE\) at Johns Hopkins University \(JHU\)](#). This is a highly customized dashboard that led Esri to begin providing standardized resources to organizations that are tracking the virus.

If you have not explored the Esri resources, visit the [COVID-19 GIS Hub](#) to learn more about the templates available and view examples of resources currently used by agencies around the world. If you do not have a need to map the spread of coronavirus in your community, the templates and help documents may provide some insight about using Operations Dashboard, Survey123, and other maps & apps in different ways to benefit your organization.

A few of our Michigan GIS colleagues have been tasked with standing up COVID-19 dashboards. Templates made it easier to meet the needs of the health departments, giving both GIS and public health experts a common set of tools to begin the conversation. In this tour of map-centric coronavirus resources, let's start with the State of Michigan which uses a [Microsoft Power BI dashboard](#) to track the number of cases by county and by date reported along with testing statistics. Even on this dashboard, a map of the state is featured on the Current Status tab that opens by default.

The University of Michigan, School of Public Health has created a dashboard that examines the trends related to risk in the state's reopening plan. The [MI Safe Start Map Dashboard](#) allows you to view risk levels via an interactive map. Clicking on a county will show you the rate of new infections and testing capacity.

Most county or regional health departments have created websites or dashboards to provide information to the public with easily understandable graphs, charts and widgets specific for their coverage area. IMAGIN is hosting an [ArcGIS Online web map](#) that indicates the method used to share the local COVID data along with a link to the resource.



The dashboards and websites provide interesting insights to the current state of the pandemic over a relatively small geographic region. Each resource includes different ways to present complex data that might inspire your next project. Feel free to explore the resources highlighted in this article and the links to the health department COVID-19 response information provided through the interactive web map. We hope these resources will help you answer questions about the pandemic where you live, work or play!