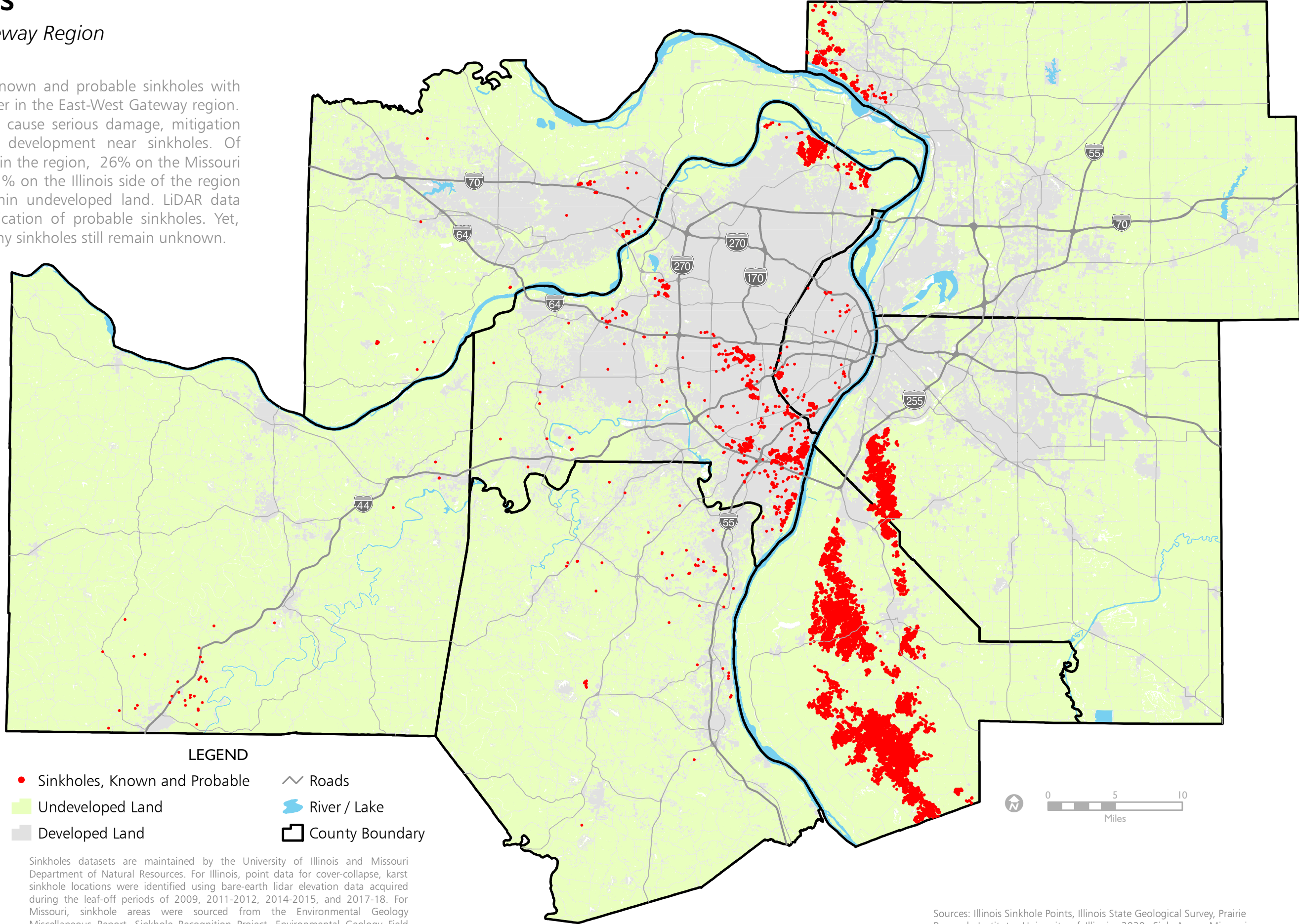


Sinkholes

East-West Gateway Region

October 2021

This map depicts known and probable sinkholes with developed land cover in the East-West Gateway region. Since sinkholes can cause serious damage, mitigation efforts avoid land development near sinkholes. Of sinkholes identified in the region, 26% on the Missouri side and at least 91% on the Illinois side of the region are completely within undeveloped land. LiDAR data enables the identification of probable sinkholes. Yet, the locations of many sinkholes still remain unknown.



LEGEND

- Sinkholes, Known and Probable
- Undeveloped Land
- Developed Land
- ~ Roads
- ~ River / Lake
- County Boundary

Sinkholes datasets are maintained by the University of Illinois and Missouri Department of Natural Resources. For Illinois, point data for cover-collapse, karst sinkhole locations were identified using bare-earth lidar elevation data acquired during the leaf-off periods of 2009, 2011-2012, 2014-2015, and 2017-18. For Missouri, sinkhole areas were sourced from the Environmental Geology Miscellaneous Report, Sinkhole Recognition Project, Environmental Geology Field Map, and Mobile GIS collection. Data from the National Land Cover Database (NLCD) was grouped into the categories undeveloped and developed land and clipped to a half miles from sinkholes in Missouri and karst sinkhole areas for Illinois.

Sources: Illinois Sinkhole Points, Illinois State Geological Survey, Prairie Research Institute, University of Illinois, 2020; Sink Areas, Missouri Department of Natural Resources, 2018; U.S. Geological Survey, Multi-Resolution Land Characteristics (MRLC) consortium, a group of federal agencies, 2019; East-West Gateway Council of Governments