

Wisconsin Trauma Drivetime Report

Traumatic injuries and the importance of trauma centers

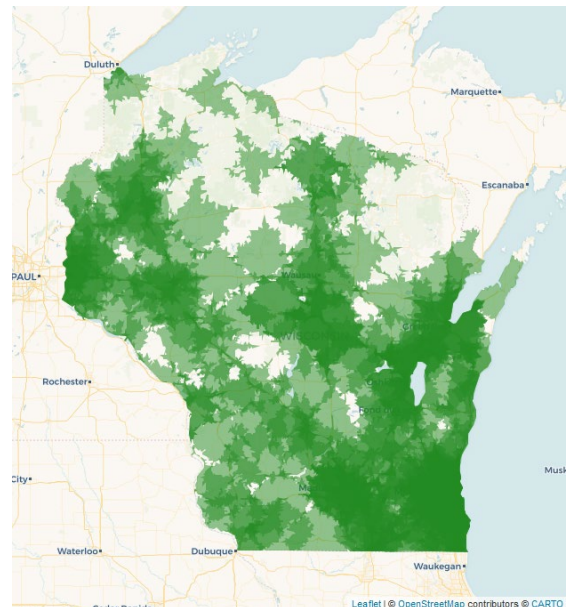
As of December 2024, 98 of Wisconsin’s 129 hospitals are classified as trauma centers. Participation in the Wisconsin Trauma System is voluntary and means that hospitals are being proactive in being prepared to treat trauma injury patients. There are [four levels of classification](#), with Level I centers possessing the most capabilities and providing the highest level of care. These hospitals provide life-saving care to injured patients, and **in 2023 the Wisconsin Trauma System treated over 38,000 traumatic injuries.**

Trauma classification requires hospitals to undergo a comprehensive application and site visit process with clinical experts. Trauma centers must meet rigorous standards, including a process improvement program to critically review treatment and care of injured patients across the continuum of care, specific equipment for treating injuries including pediatric patients, and more trauma-specific training for medical staff. EMS may bypass your local hospital if it is not a trauma center to ensure the patient receives an appropriate level of care for their injuries, based on [national and local triage protocols](#).

While most people in Wisconsin live close to a trauma center, many do not. Proximity to a trauma center is important as quick transport to definitive medical care impacts patient survival. This report will examine how many people live within 30 minutes of a trauma center and how changes to the Wisconsin Trauma System would impact Wisconsinites.

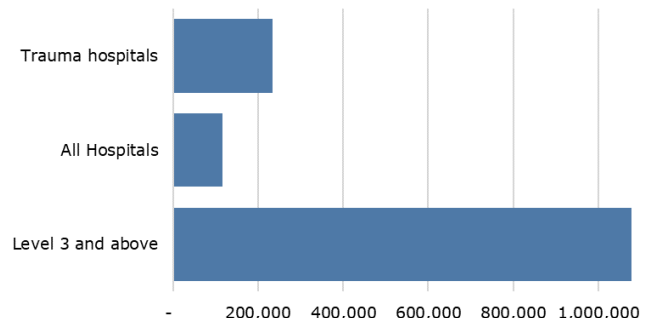
Overview

Though most people in Wisconsin are within a 30-minute drive of a trauma center, increasing the number of hospitals participating in the Trauma System and ensuring hospitals do not become unclassified is important. This is to ensure people in Wisconsin, and especially those in rural areas, have access to quality care for traumatic injuries. **96% of Wisconsin’s population live within 30 minutes of a trauma center** (5,660,404 of the 5,893,718 Wisconsin residents in the 2020 Census). **Having all hospitals be trauma centers would increase those within 30-minute drives by 117,345 individuals**, bringing those living within 30 minutes of a trauma center from 96% to 98%. On the other hand, all Level IV hospitals becoming unclassified would decrease those within 30 minutes of a trauma center by 844,026. This would leave only 82% of the state’s population within 30 minutes of a trauma center. Level IV hospitals are vitally important for providing advanced stabilization and life support to trauma patients in Wisconsin, especially rural residents.



A map of 30-minute drivetimes to each trauma center in and bordering Wisconsin. Darker areas indicate overlaps in 30-minute drivetimes.

Number of Wisconsinites Living Outside 30-Minute Drivetimes



Rural and urban drivetimes

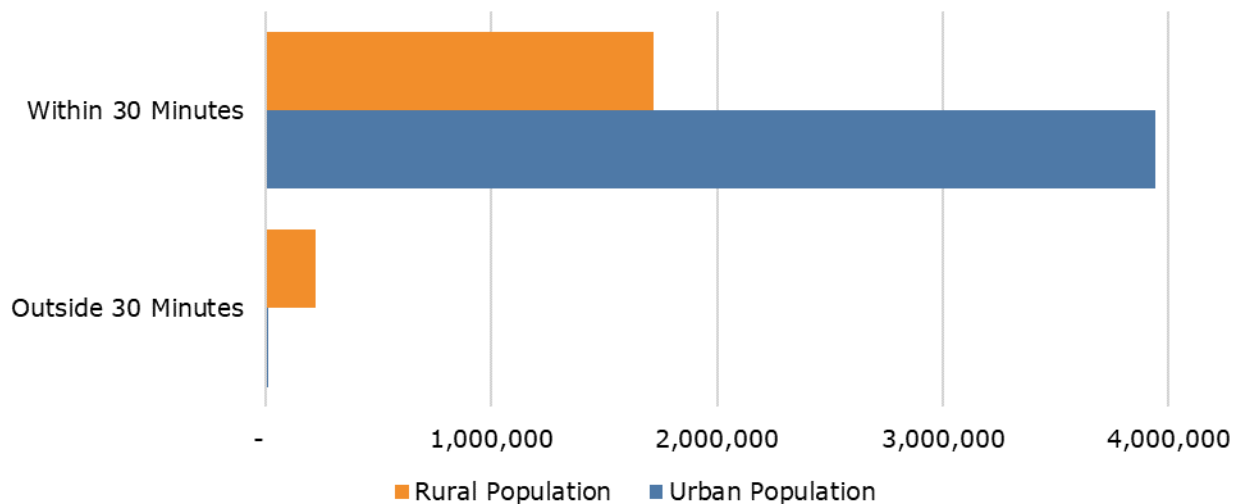
Based on the 2020 Census, 3,940,904 urban Wisconsinites are within 30 minutes of a trauma center and 1,719,500 rural Wisconsinites are within 30 minutes. **12,787 urban residents and 220,527 rural residents are farther than 30 minutes from a trauma center.** This means 99.7% of urban residents, but only 88.6% of rural residents are within 30 minutes of a trauma center. In Wisconsin, more rural residents need to travel farther to receive trauma care.

Additionally, there are disparities in income between rural residents who live within 30 minutes of a trauma center and those that live farther away. Rural residents (defined as people residing in block groups where more than 90% of the population is rural as defined by the Census Bureau) who live within 30 minutes of a trauma center have a per capita income of \$33,724. This is \$2,636 more compared to those farther than 30 minutes who have a per capita income of \$31,088.

If all hospitals were trauma centers in Wisconsin, 106,093 more rural individuals would be within 30 minutes of a trauma center. Thus, increasing the percentage by 6 points, to 94.1%.

Level IV hospitals are especially important to Wisconsin's rural residents. If Wisconsin lost all Level IV trauma centers, only 1,069,393 rural residents would be within a 30-minute drive of a trauma center. This would reduce the number of rural Wisconsinites close to a trauma center by 650,107, a 38% reduction. Only 55% of rural residents would be within 30 minutes of a trauma center.

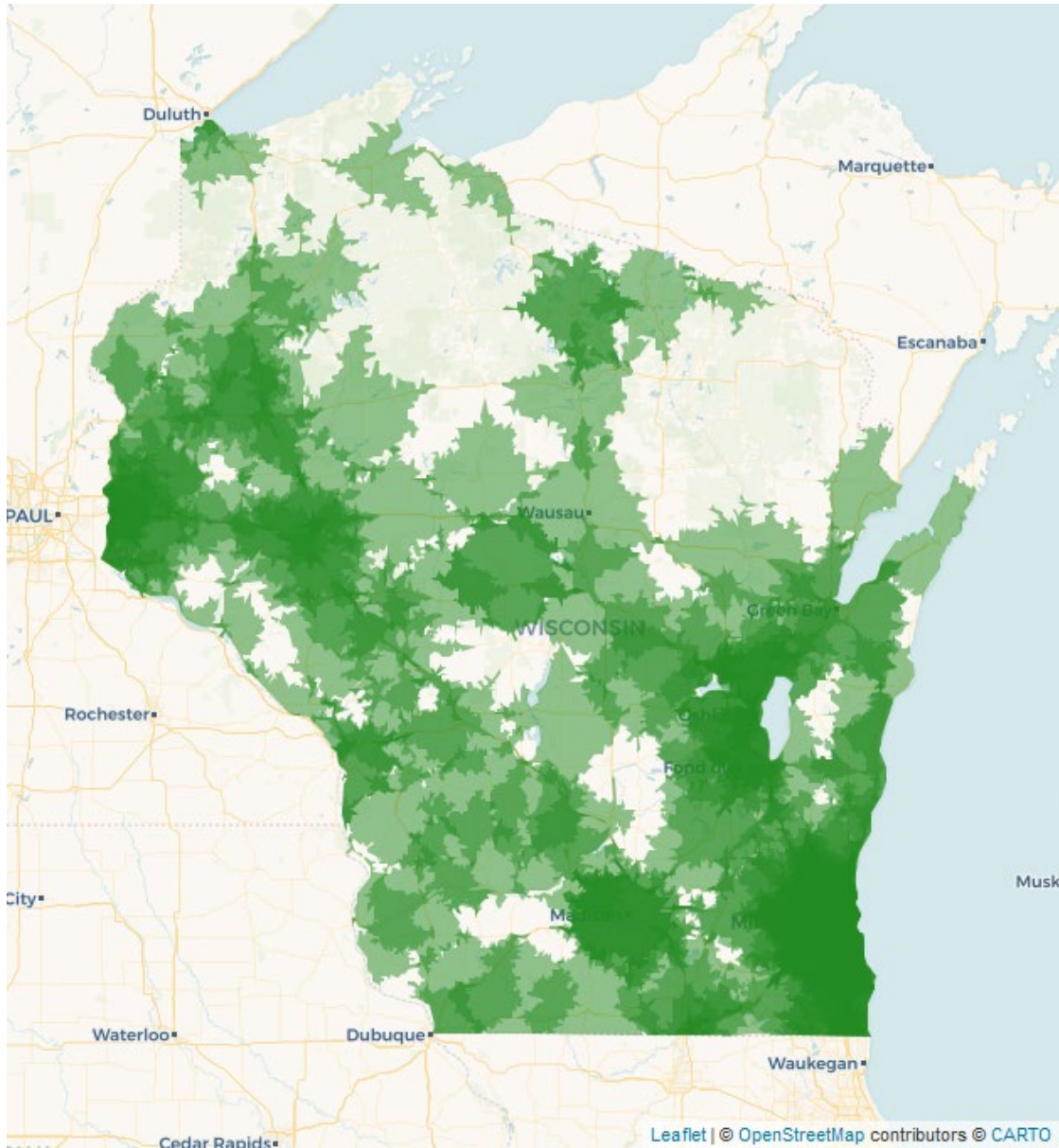
Populations Within 30 Minutes of a Trauma Center by Rurality



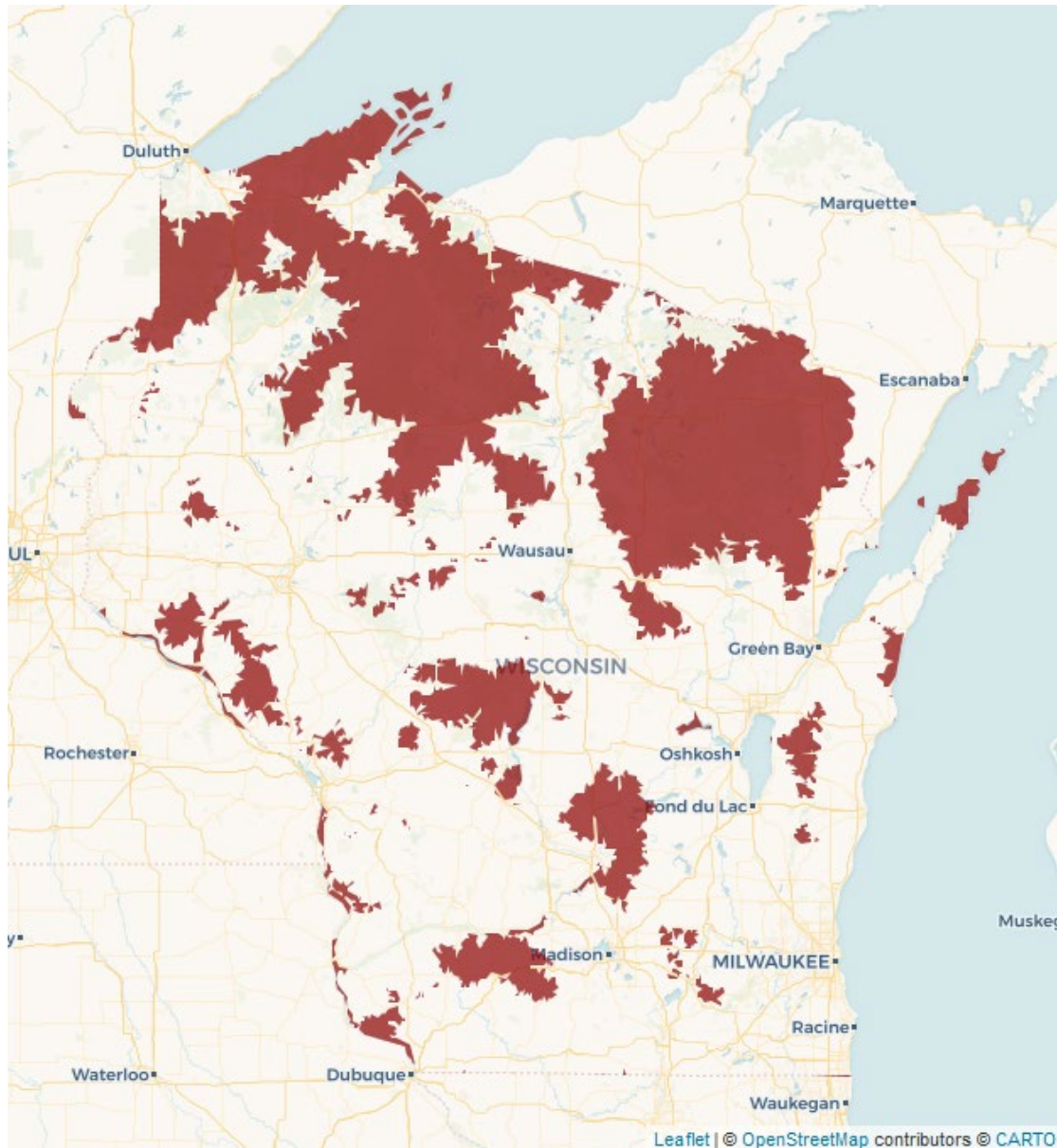
The following pages of the report show maps of the 30-minute drive times around trauma centers and unclassified hospitals in Wisconsin. They display a clear pattern: rural areas have less proximity to trauma centers and there are opportunities for more rural residents of Wisconsin to be closer to trauma centers if more hospitals enter the trauma system. Rural residents are also those most likely to have decreased proximity to trauma centers if hospitals become unclassified.

Area currently within 30-minute drivetimes of trauma centers

Currently, 5,660,404 Wisconsin residents are within a 30-minute drive of a trauma center with 233,314 outside this 30-minute drive distance. There is a significant difference between urban and rural areas as well with 99.7% of urban residents within 30-minute drive while only 88.6% of rural residents are within a 30-minute drive.

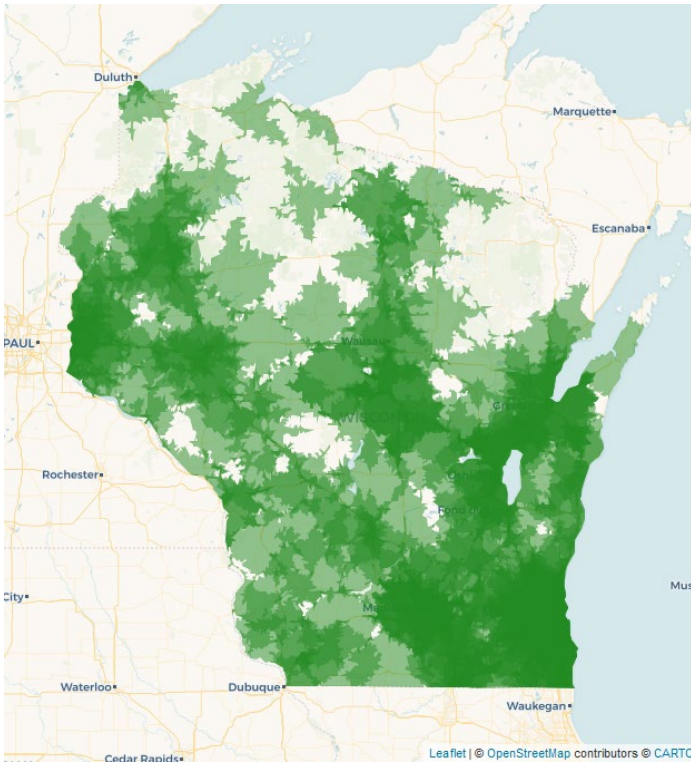


Area currently beyond a 30-minute drivetime from a trauma center



This map displays which areas in Wisconsin are more than a 30-minute drive from a trauma center. Significant portions of northern Wisconsin are quite far from a trauma center and patients may often be transported to Minnesota or the Upper Peninsula of Michigan for trauma care as hospitals across state lines may be the closest to these individuals.

Area within 30-minute drivetimes of all hospitals in Wisconsin



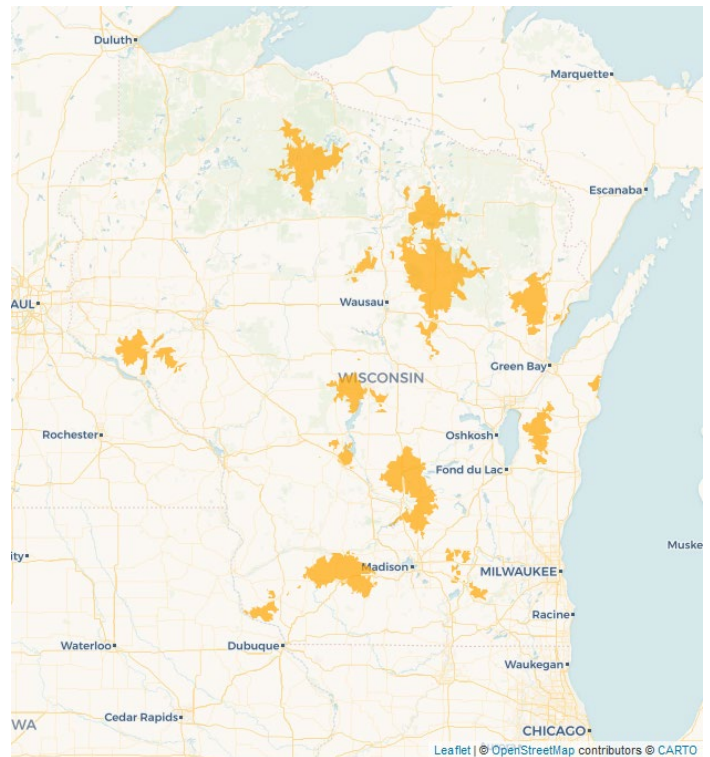
To the left is a map showing the area of 30-minute drivetimes from all hospitals in Wisconsin. If all hospitals participated in the trauma care system, 5,777,749 people would be within a 30-minute drive of a trauma center and only 115,969 outside of this drivetime. Most of those that would now be within 30 minutes of a trauma center are people who live in rural areas of the state.

Participation in the Wisconsin Trauma System is voluntary and requires hospitals take extra steps to be prepared to treat injured patients. To be a trauma center, hospitals must be verified by the American College of Surgeons if they wish to be classified as Level I or II, or through the Wisconsin Department of Health Services (DHS) for Levels III and IV. DHS provides a variety of resources and trainings to trauma centers to ensure their success. As well as to hospitals wishing to become classified, to assist them in the process.

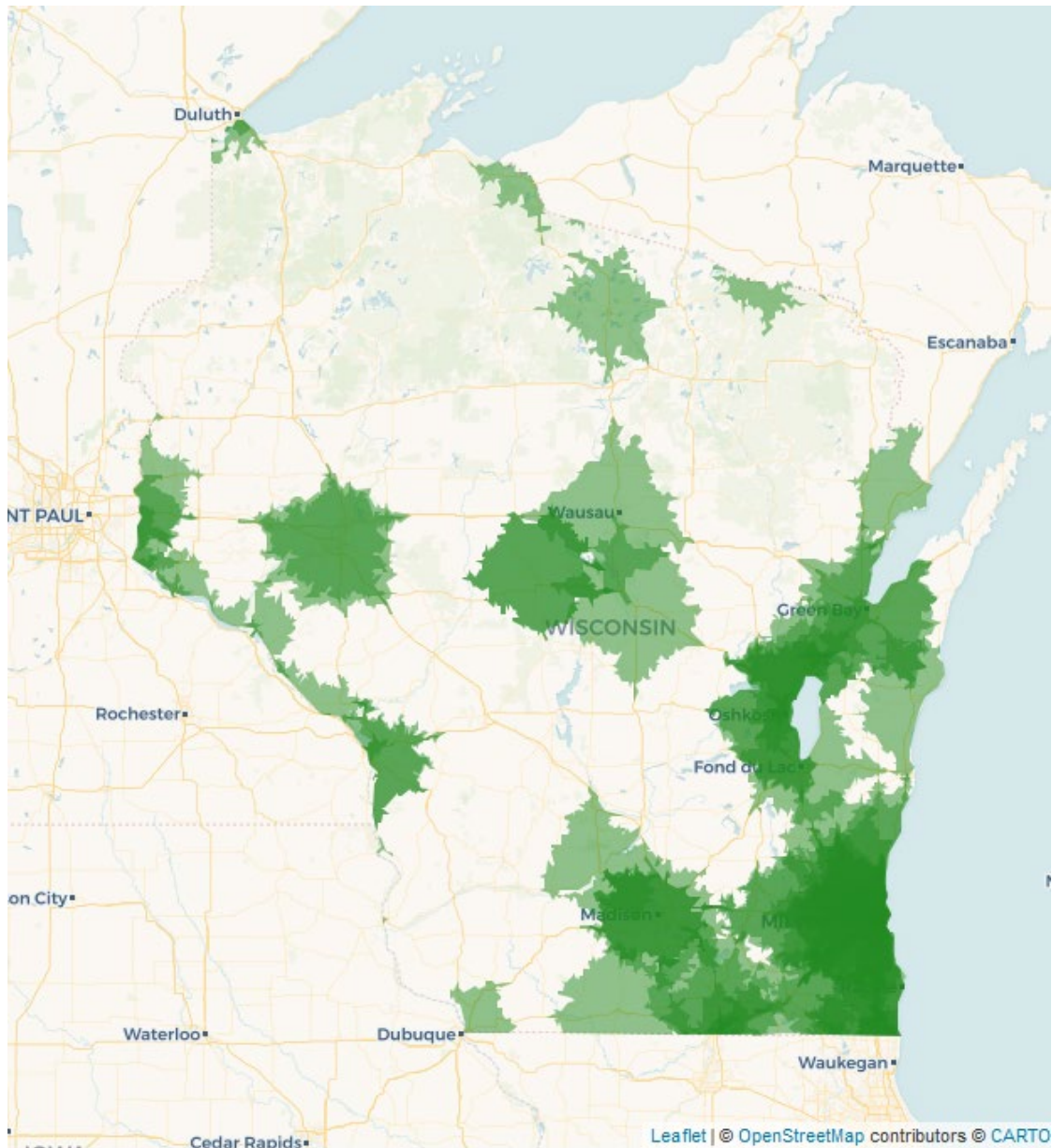
Areas not currently within a 30-minute drivetime of a hospital that would be if all hospitals were trauma centers

This map highlights the specific areas that would be within 30 minutes of a trauma center if all hospitals in Wisconsin became trauma centers.

All hospitals in Wisconsin, including those without trauma classification, have an important role in providing treatment to injured patients. It is important that patients are delivered in a timely manner to the closest appropriate hospital whose resources match the needs of injured patients.



Areas within a 30-minute drivetime to Level I, II, III trauma centers and out-of-state trauma centers



If all Wisconsin Level IV Trauma Centers became unclassified, 14% of Wisconsin's population would no longer be within 30 minutes of a trauma center. 77% of the 827,064 residents who would now be outside of that 30-minute range are rural residents. Maintaining our Level III and IV hospitals and increasing the number of unclassified hospitals that become trauma centers are important steps to ensure that rural Wisconsin residents have access to quality health care.

Methods and Data

Individuals are considered to be within 30-minute drives of a trauma center if the population-weighted center of the census block group they reside in is within a 30-minute drivetime of a Wisconsin hospital or out-of-state trauma center. 2020 Census data was used for this analysis and National Historical Geographic Information System data for rurality and block group centroids.

Report Citations:

U.S. Census Bureau, "American Community Survey: 5-Year Estimates," 2020

IPUMS NHGIS, University of Minnesota, www.nhgis.org : 2020 census block group population weighted centroids

Here Platform, <https://platform.here.com/> : drivetimes from hospitals