



Compendium of key analyses for Kentucky

Collaborative Blueprint created by and for Kentucky's Economic Developers

December 2023



Overview of this document

This document contains the following from the Collaborative Blueprint deliverables:

- Economic overview of Kentucky, focusing on 5 parts: Sectors & Firms, Talent & Human capital, Capital & Innovation, Infrastructure, Business climate, and Economic Development Operating Capabilities
- The Infrastructure section provides an overview of electricity costs and reliability, broadband availability, infrastructure rankings compared to competitor states, and other infrastructure-related maps and statistics.
- Where applicable, the levers are analyzed through multiple lenses: state-wide, geographic breakdown, and by demographic group
- Data as of Dec 2023

Analyses were completed against a 6 part framework




- 1 Sectors & Firms**
- 2 Talent & Human capital**
- 3 Capital & Innovation**
- 4 Infrastructure**
- 5 Business climate**
- 6 Economic Development Operating Capabilities**

Where applicable, the levers are analyzed through multiple lenses: **state-wide, geographic breakdown, and by demographic group**

4. Infrastructure

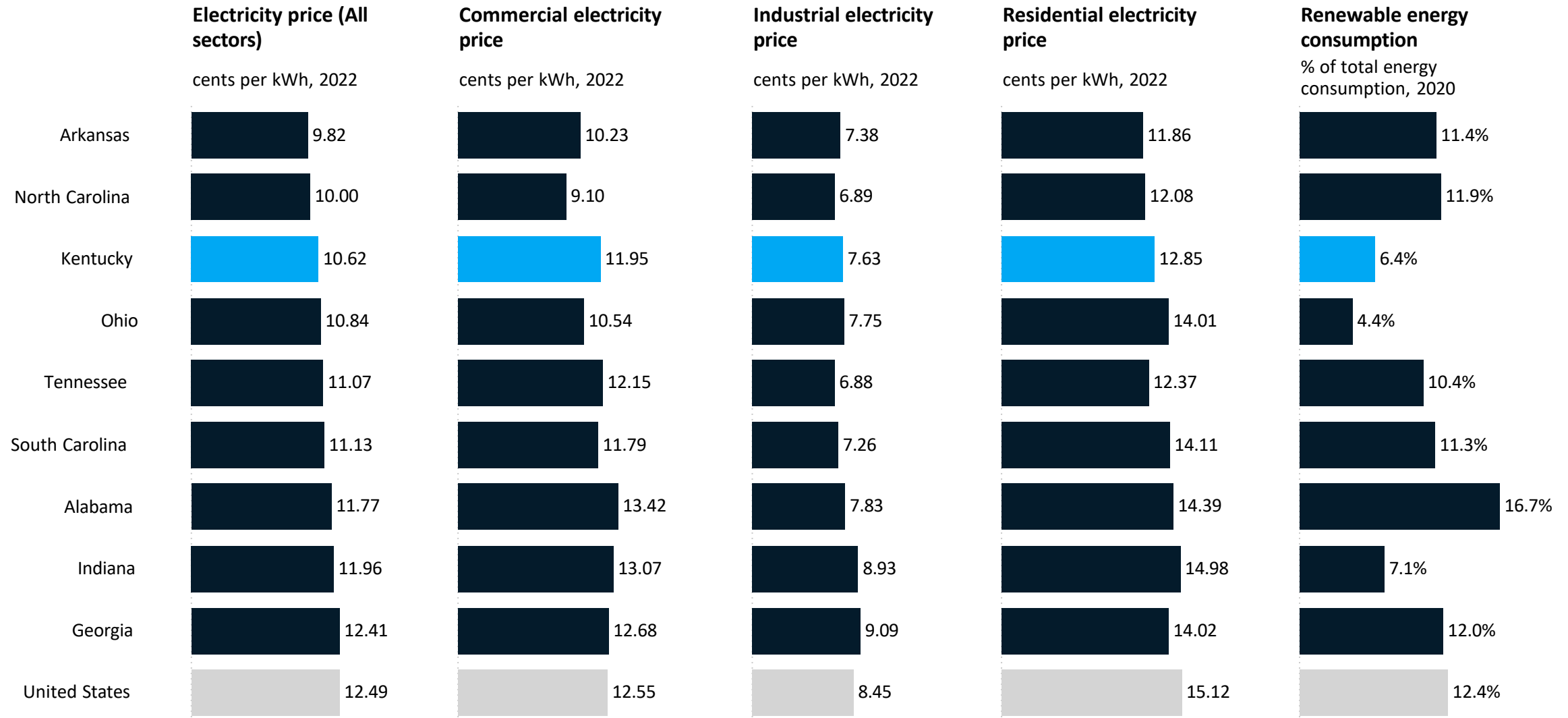
Kentucky outperforms on electricity costs and road quality, but trails on renewable energy consumption and broadband adoption

US News Best States for Infrastructure, National ranks, 2023

Rank  1 50

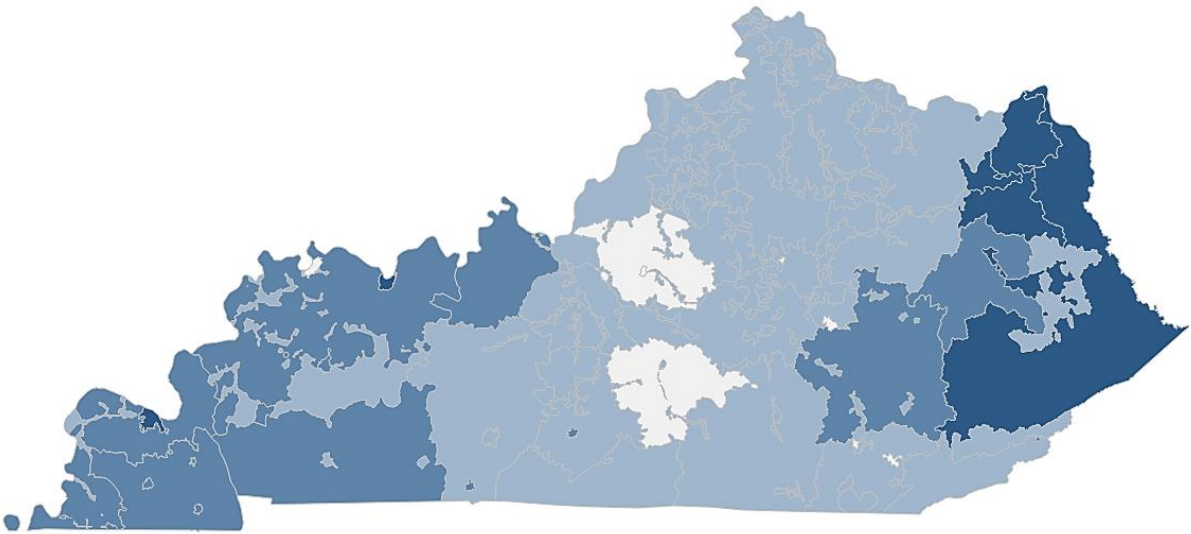
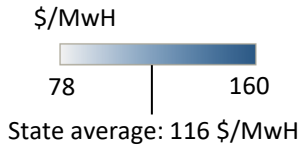
		Kentucky	Georgia	Tennessee	North Carolina	Indiana	South Carolina	Ohio	Alabama	Arkansas
Overall Rank	Infrastructure	23	15	16	25	26	31	32	36	40
	Energy									
	Electricity price	18	36	24	12	33	25	23	28	10
	Power grid reliability	30	29	39	27	33	19	34	26	44
	Renewable energy usage	43	23	29	24	38	27	46	15	26
Transportation	Bridge quality	33	5	11	31	24	18	21	8	23
	Commute time	20	44	29	24	21	35	17	31	13
	Public transit usage	24	32	38	31	41	48	27	50	43
	Road quality	7	6	1	14	24	9	21	11	43
Internet access	Access to gigabit internet	8	13	4	24	10	23	26	25	15
	Broadband subscription rate	44	25	43	33	31	43	34	47	45

Kentucky's electricity prices and renewable energy consumption are below the national average and most peers

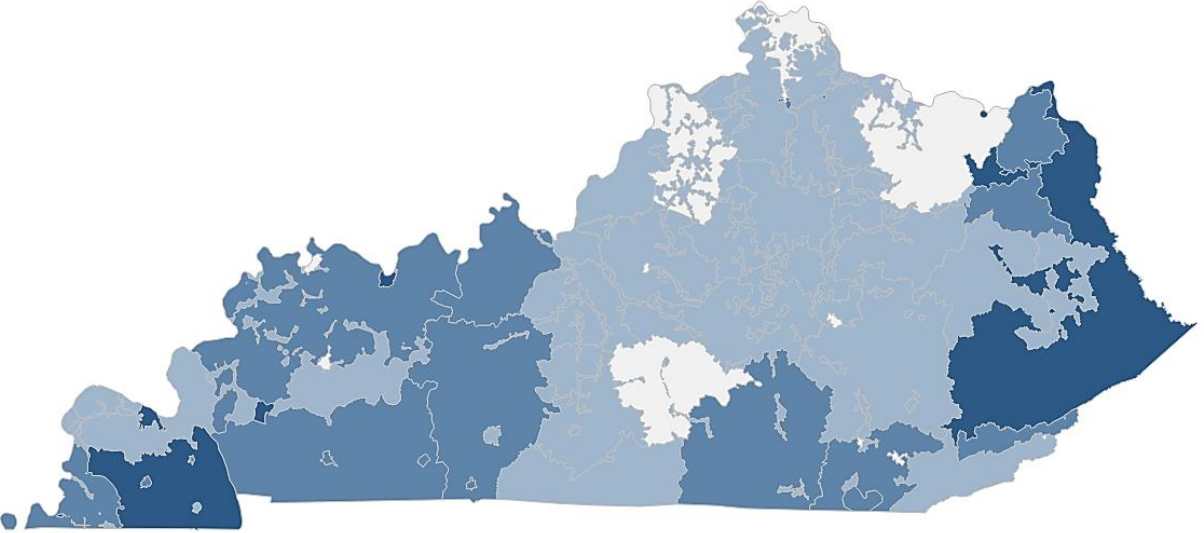
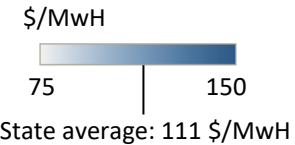


Central Kentucky has lower residential and commercial electricity rates

Residential electricity price by service area, \$/MwH, 2021



Commercial electricity price by service area, \$/MwH, 2021

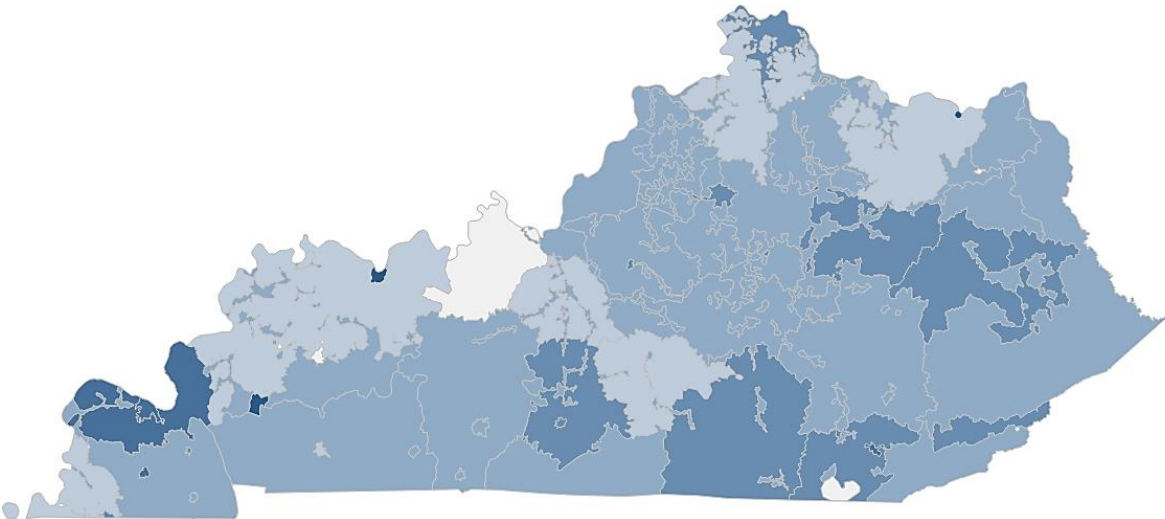
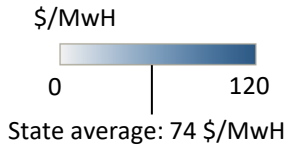


Source: Hitachi Energy Velocity, Accessed 8/23/2022

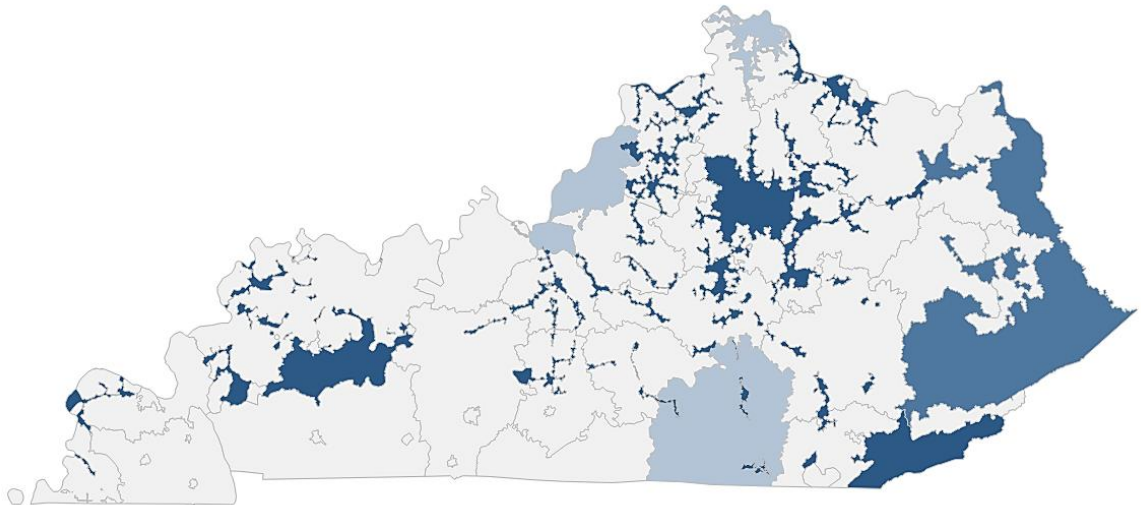
Data as of Dec 2023

Kentucky Utilities Co (Lexington and parts of West) and Kentucky Power Co (East) have the highest number of industrial customers, both offer rates below the state average

Industrial electricity price by service area, \$/MwH, 2021



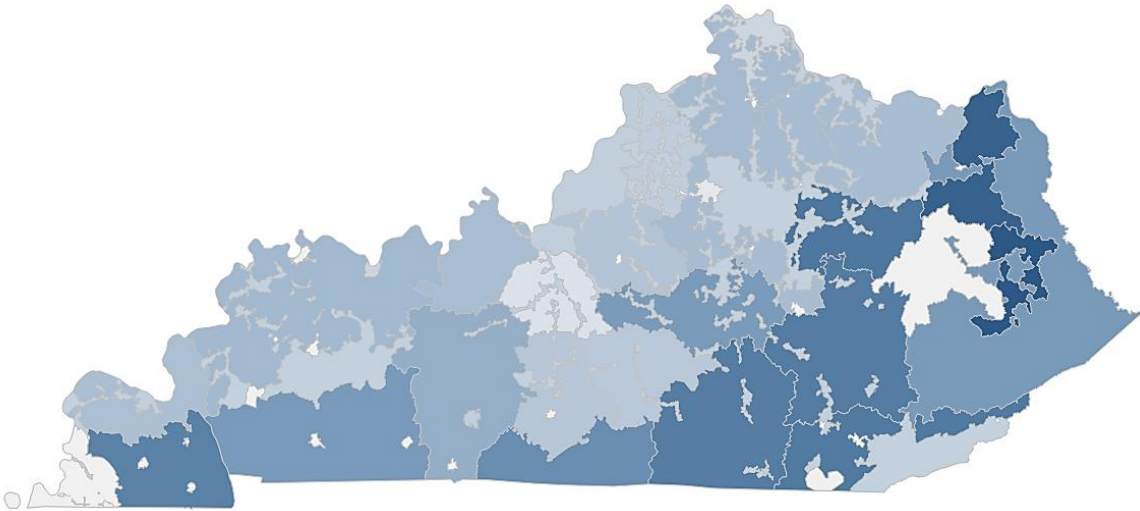
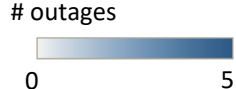
Number of industrial electric customers by service area, 2021



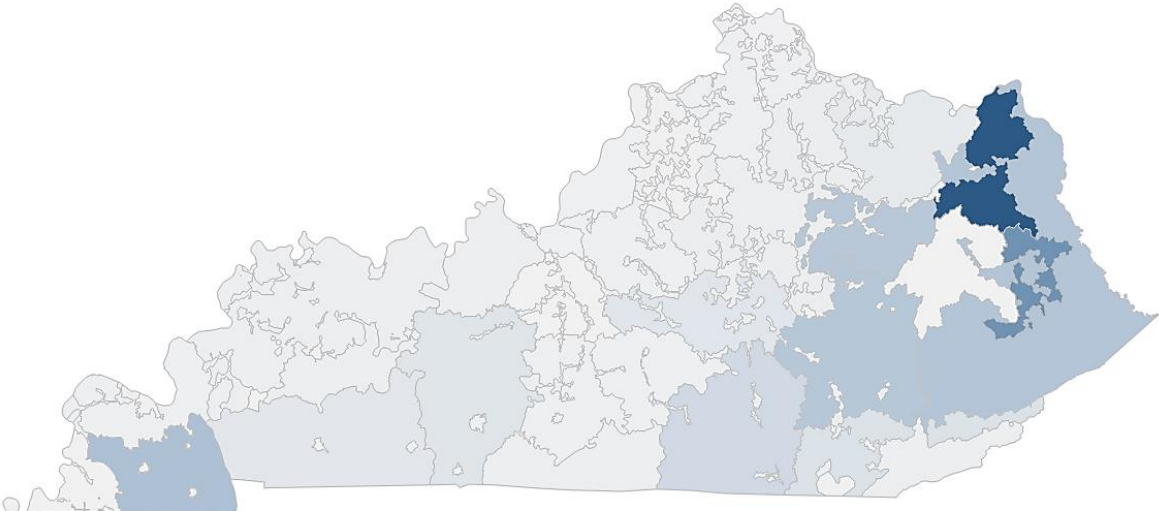
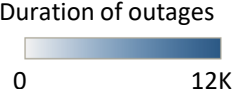
Source: Hitachi Energy Velocity, Accessed 8/23/2022

The central and northern parts of the state have more reliable electricity service

Annual outages by service area, number, 2021



Duration of outage by service area, minutes, 2021



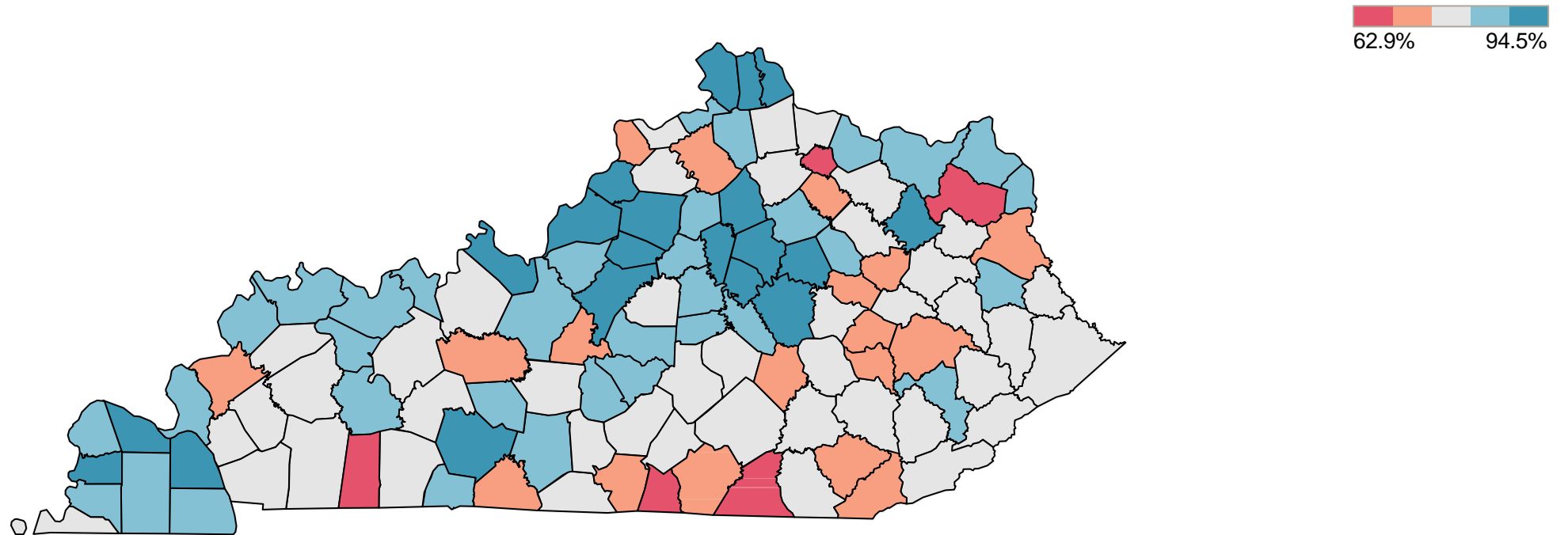
Source: Hitachi Energy Velocity, Accessed 8/23/2022

Data as of Dec 2023

Kentucky's broadband adoption varies by as much as 30 p.p. across counties

Broadband adoption by county

Percent of population in households with broadband, 2020, 5-year estimate

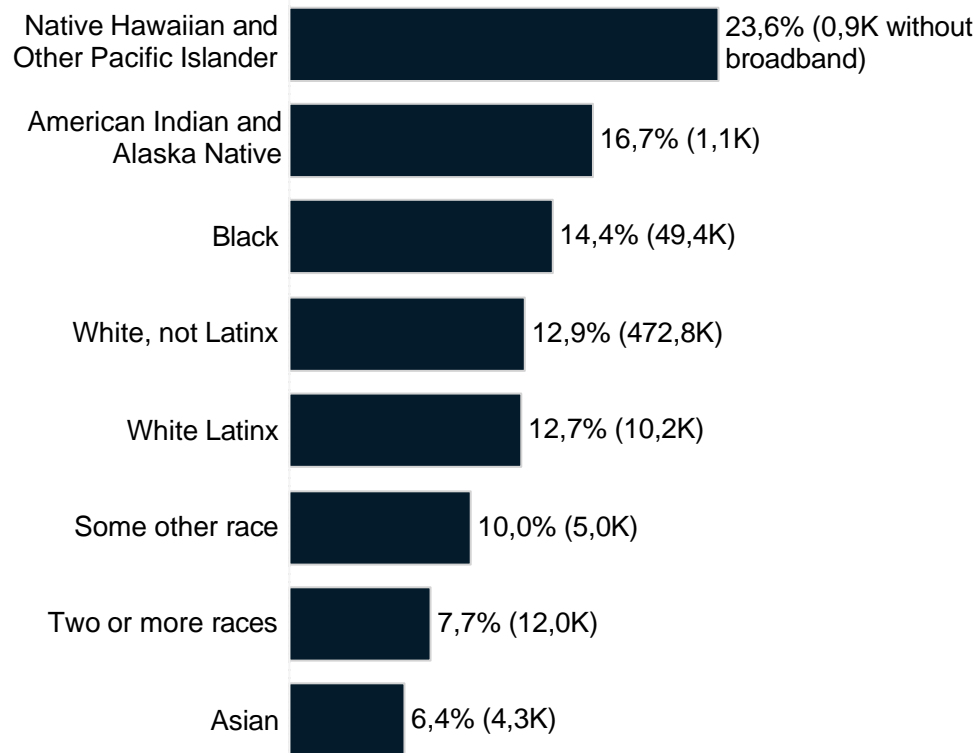


Note: Broadband is defined as households with with a computer with a broadband internet subscription such as cable, fiber optic or DSL

Kentucky's communications infrastructure is less accessible for Native Hawaiian, American Indian, and Black people

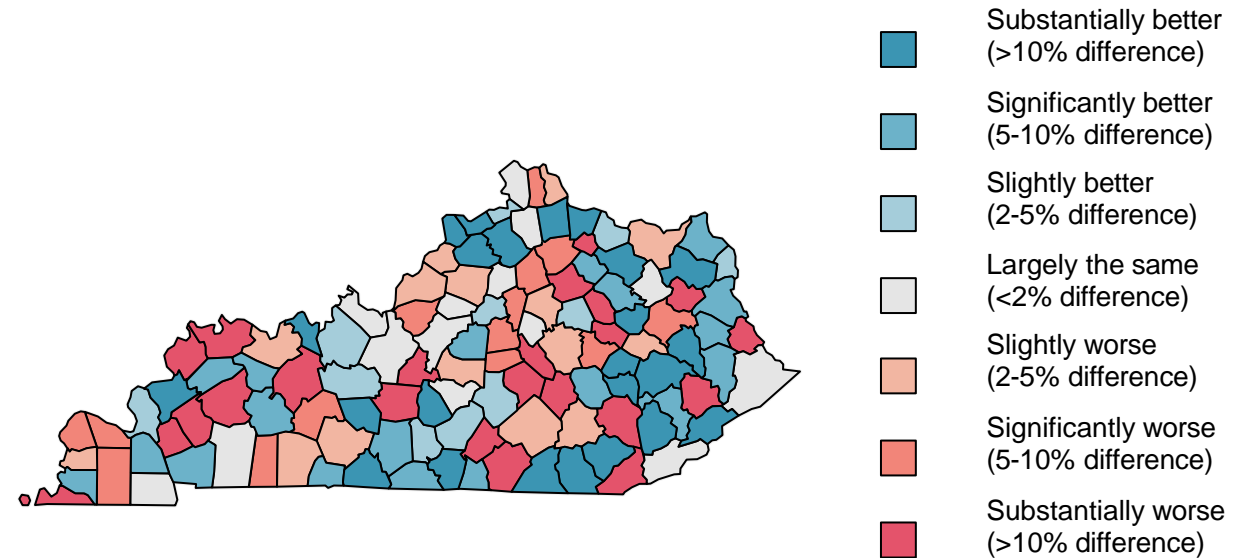
Broadband adoption

Percent of population in households without broadband, 2021, 5-year estimate



Broadband adoption gap by county

Difference in broadband access between white and non-white population p.p., 2020, 5-year estimate



Notes:

- Broadband is defined as households with with a computer with a broadband internet subscription such as cable, fiber optic or DSL
- 'White' is defined as 'White not hispanic or latino' while 'Non-white' includes everyone else

Kentucky's infrastructure grades compared to peer states

Infrastructure report card by state¹

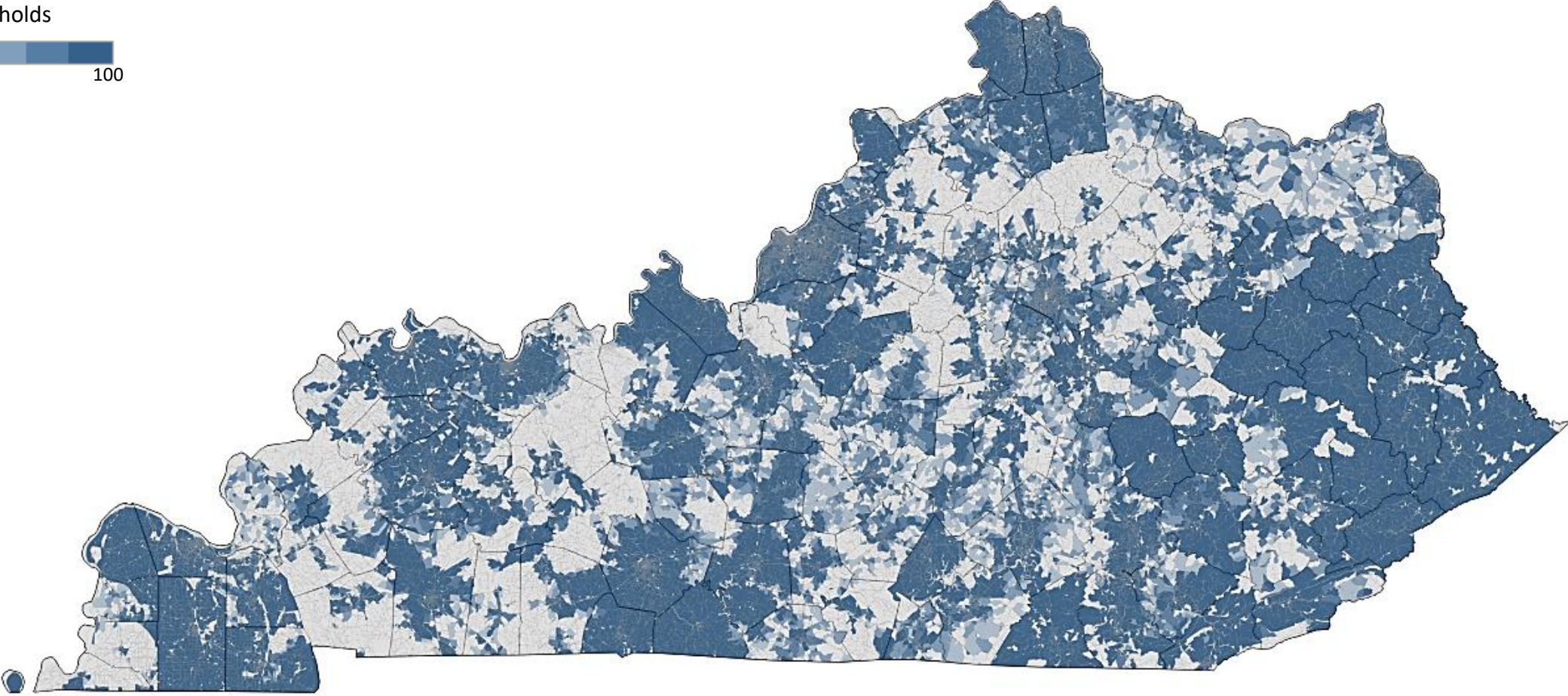
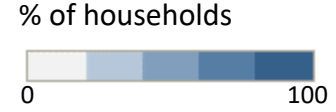
Grades
B+ D-

	Kentucky ²	Alabama ³	Georgia ⁴	Ohio ⁵	South Carolina ⁶	Tennessee ⁷
Overall Grade	C-	C-	C+	C-	D+	C
Aviation	C+	C	B+	-	D+	C+
Bridges	C-	C+	C+	C+	C	B
Dams	D+	-	D	C-	D	D+
Drinking Water	C+	C-	B-	D+	D+	C+
Energy	B-	B	B	C	-	C+
Hazardous Waste	D	-	-	D+	-	-
Levees	D+	-	-	D	-	-
Roads	D+	C-	C+	D	D	C
Solid Waste	B-	-	C	B-	-	C+
Wastewater	C-	D	D+	C-	D	C-

1. Reports have not been published for all peers, 2. 2019 report; 3. 2022 report; 4. 2019 report; 5. 2021 report; 6. 2021 report; 7. 2022 report

Served households

% of households with access to 100/20 mbps coverage, by Census block

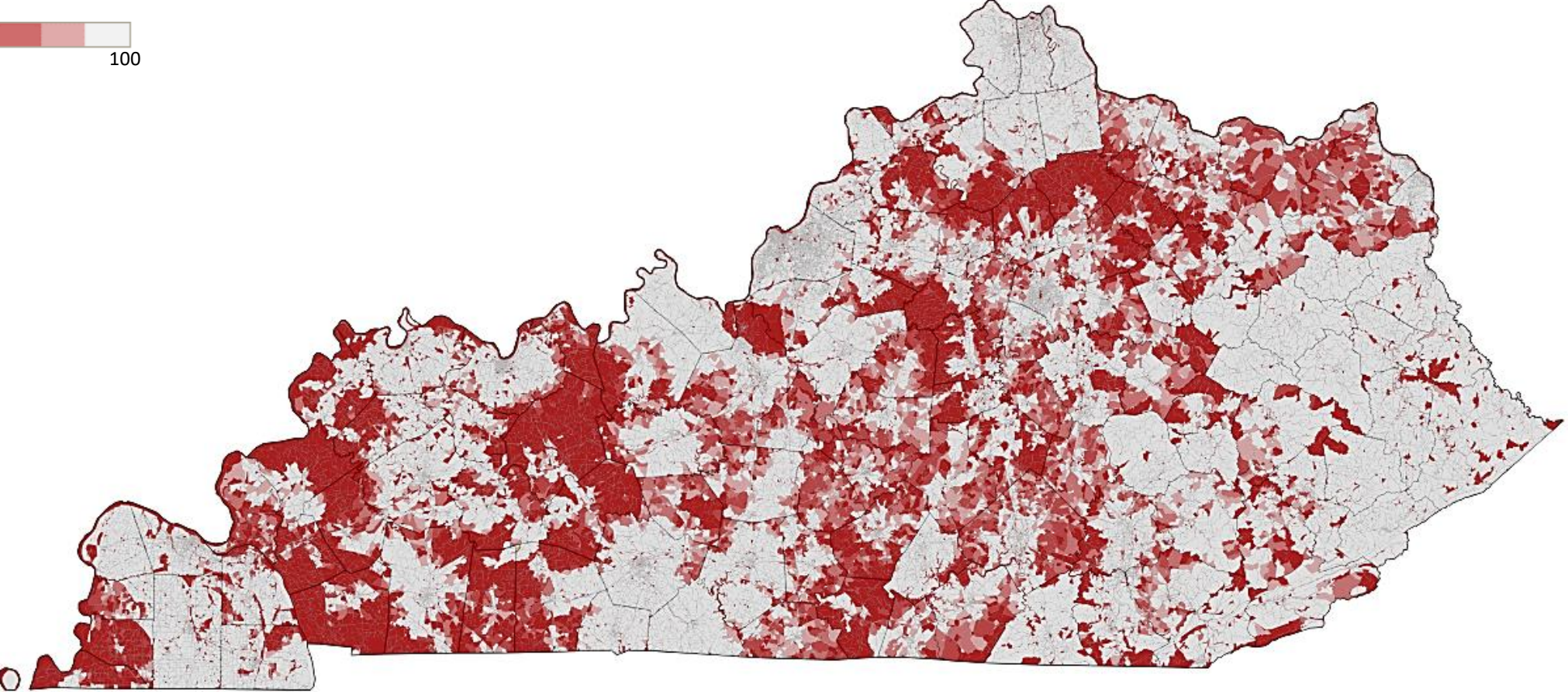
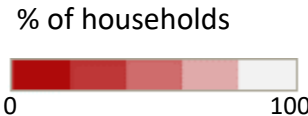


Source: FCC broadband data, US Census

Data as of Dec 2023

Underserved households

% of households with access to 25/3 mbps coverage, by Census block

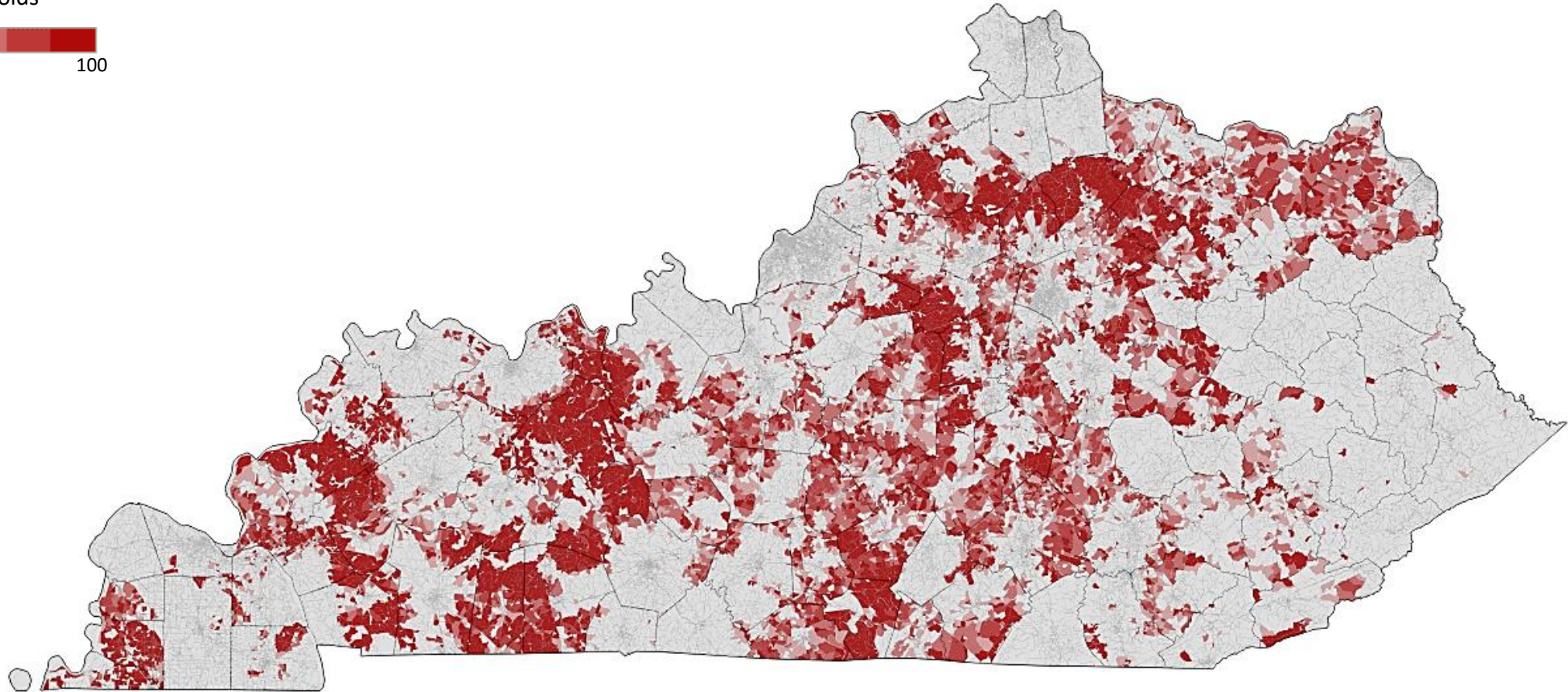
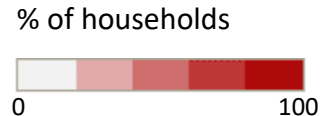


Source: FCC broadband data, US Census

Data as of Dec 2023

Unserved households

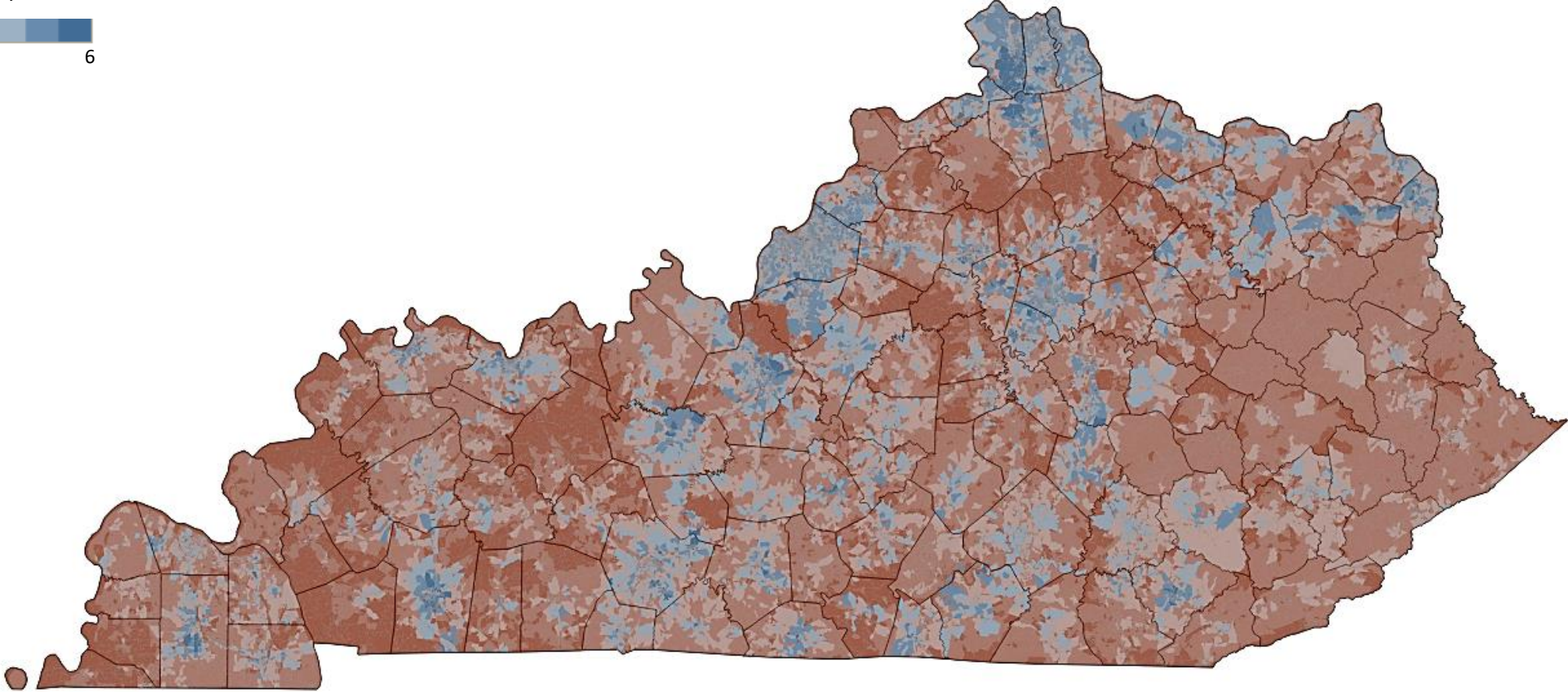
% of households with access to less than 25/3 mbps coverage, by Census block



Source: FCC broadband data, US Census
Data as of Dec 2023

Number of broadband providers by block

Number of providers



Source: FCC broadband data, US Census

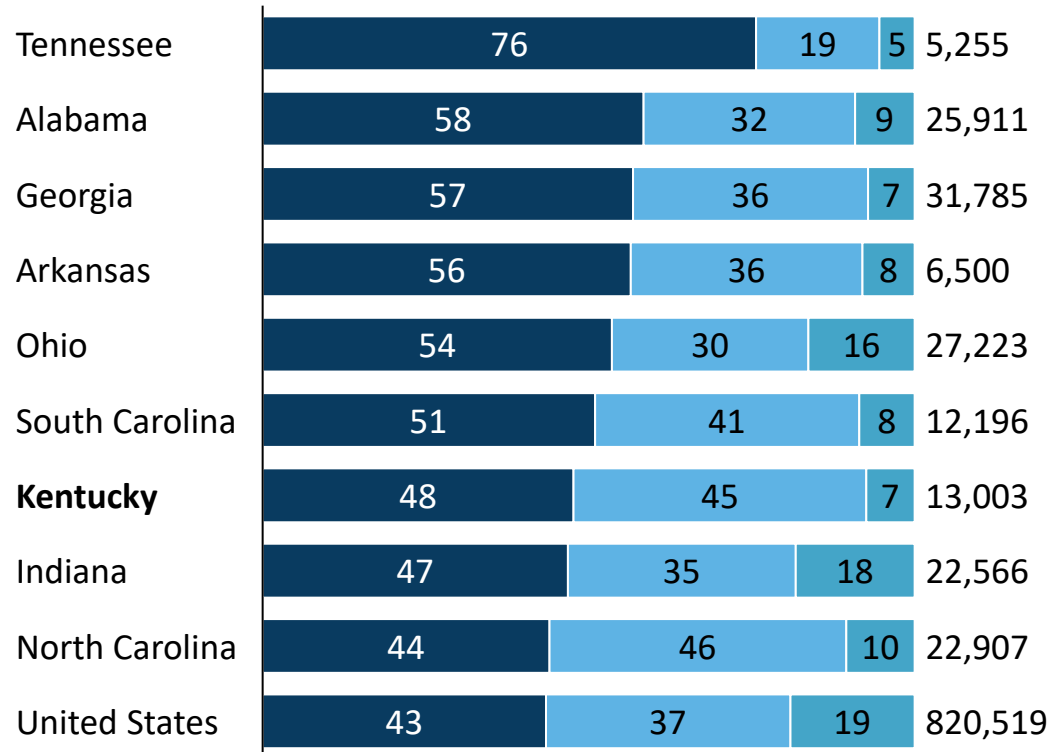
Data as of Dec 2023

Kentucky has better road quality than US average and some peers, bridge quality is below US average

Condition ■ Good ■ Fair ■ Poor

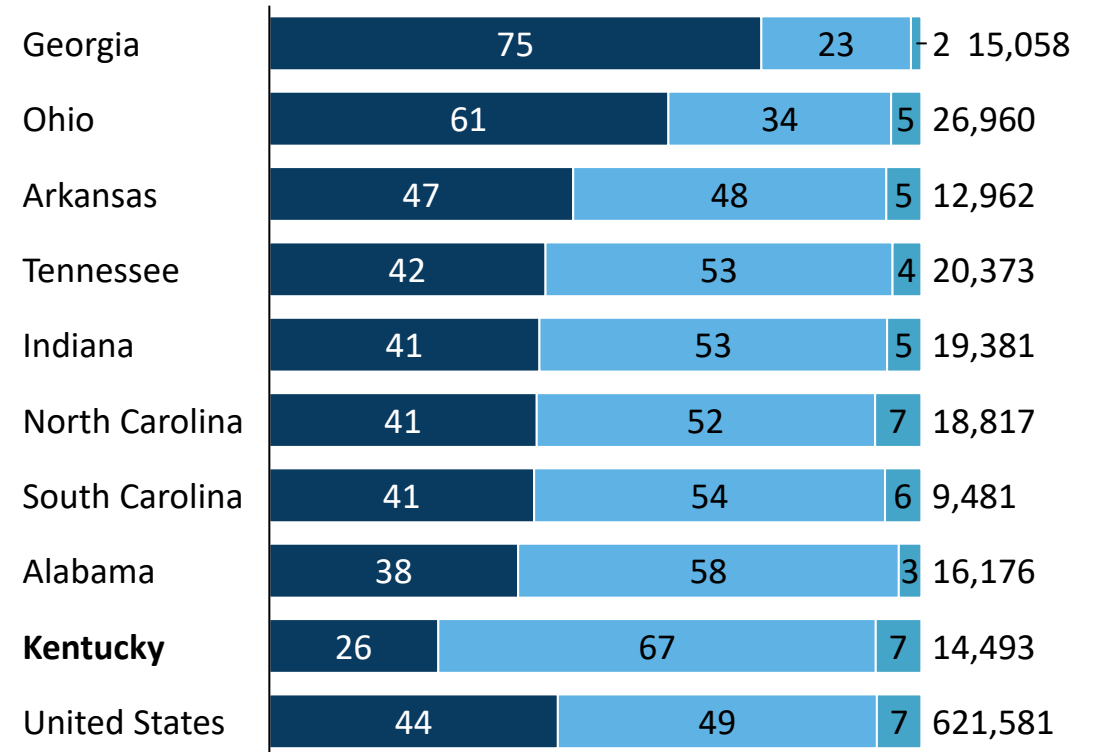
Road quality

Percent of road miles, 2020



Condition of bridges

Percent of bridges, 2023



Note: Roads in 'Poor' condition are defined as having an IRI above 170 or a PSR below 2.5. Roads in 'Fair' condition are defined as having an IRI between 95 and 170 or a PSR between 2.6 and 3.9. Road quality is measured for interstates, other freeways/expressways, principal arterials, minor arterials, rural major collectors, urban minor arterials, urban major and minor collectors.

Source: US Department of Transportation - Federal Highway Administration

Data as of Dec 2023

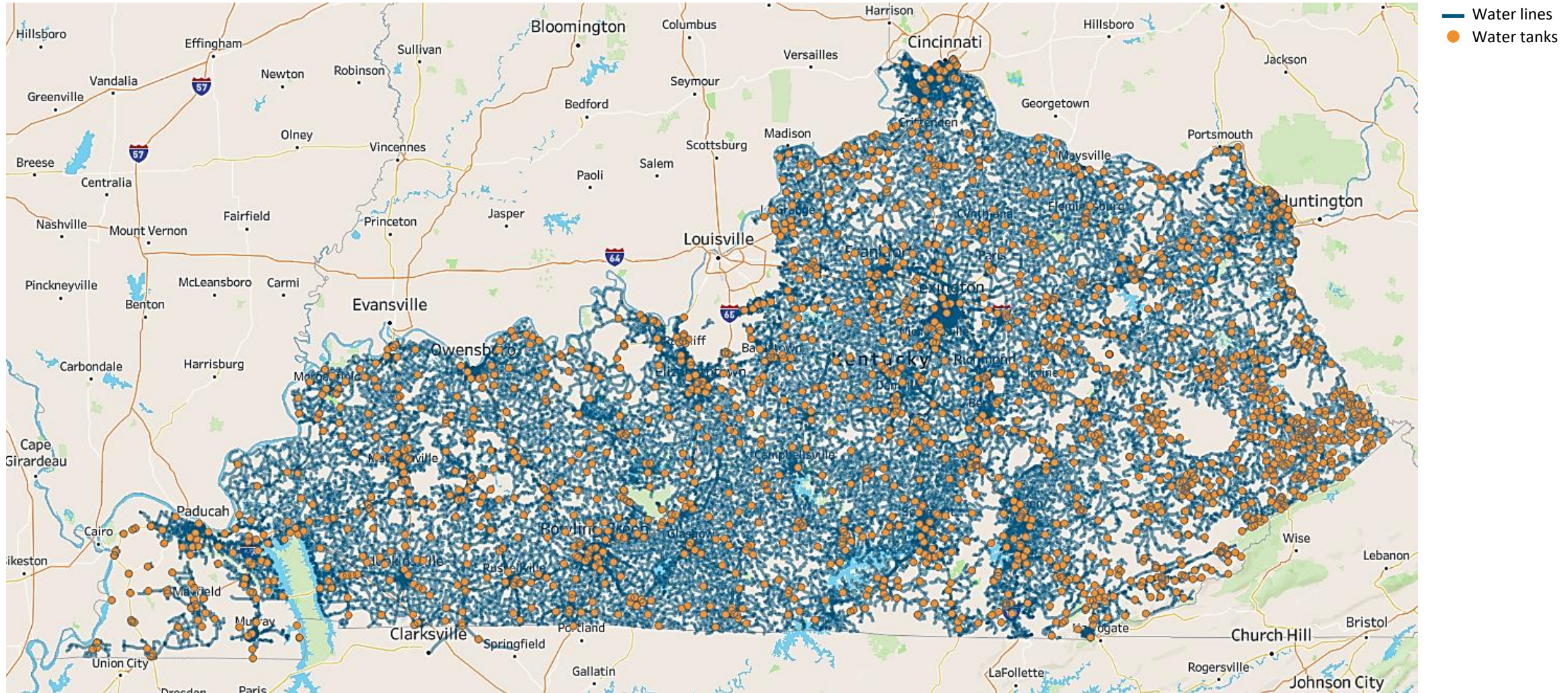
Transportation infrastructure

Kentucky's distribution and logistics infrastructure assets, 2023



Water infrastructure

Public water systems, 2023

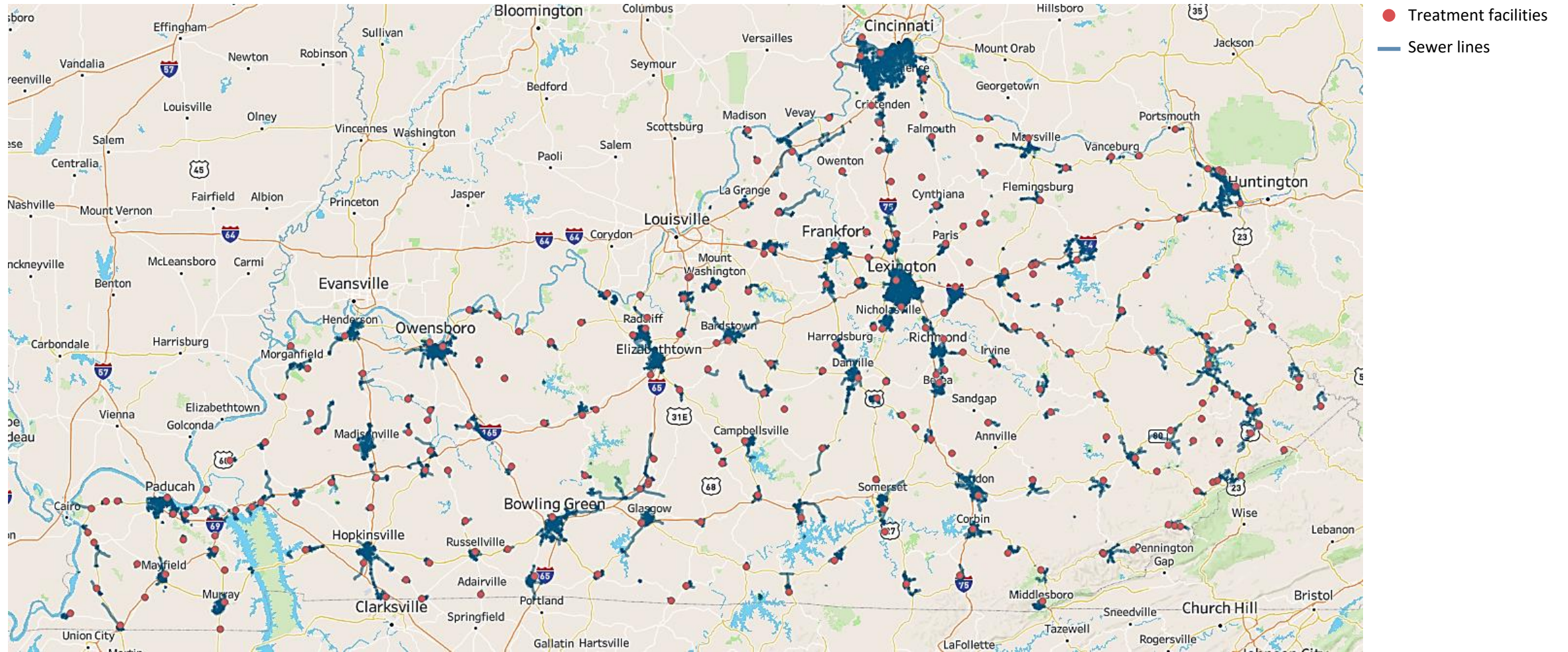


Source: KYGovMaps Open Data Portal

Data as of Dec 2023

Water infrastructure

Public wastewater systems, 2023



Source: KYGovMaps Open Data Portal

Data as of Dec 2023