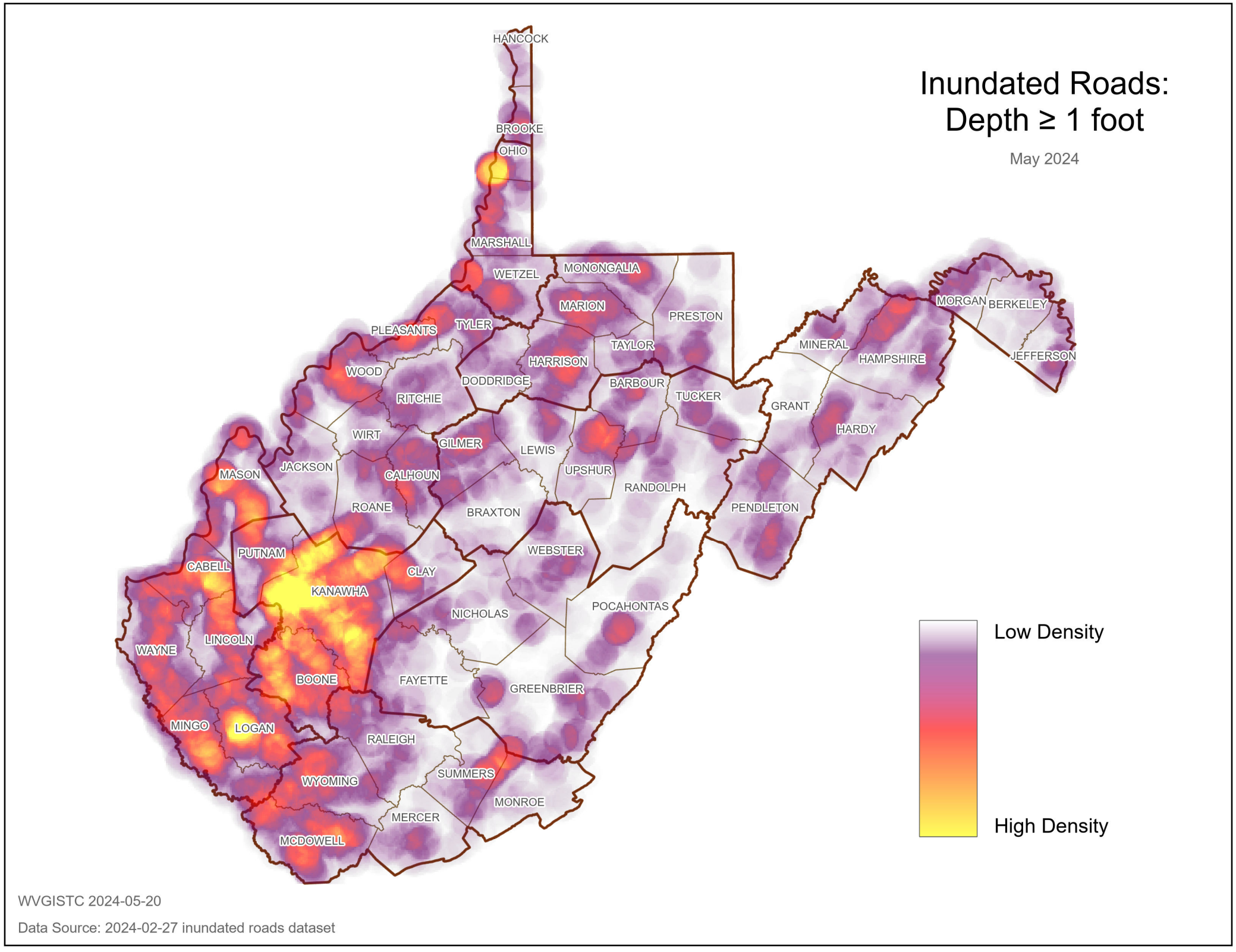


WVGISTC 2024-05-20

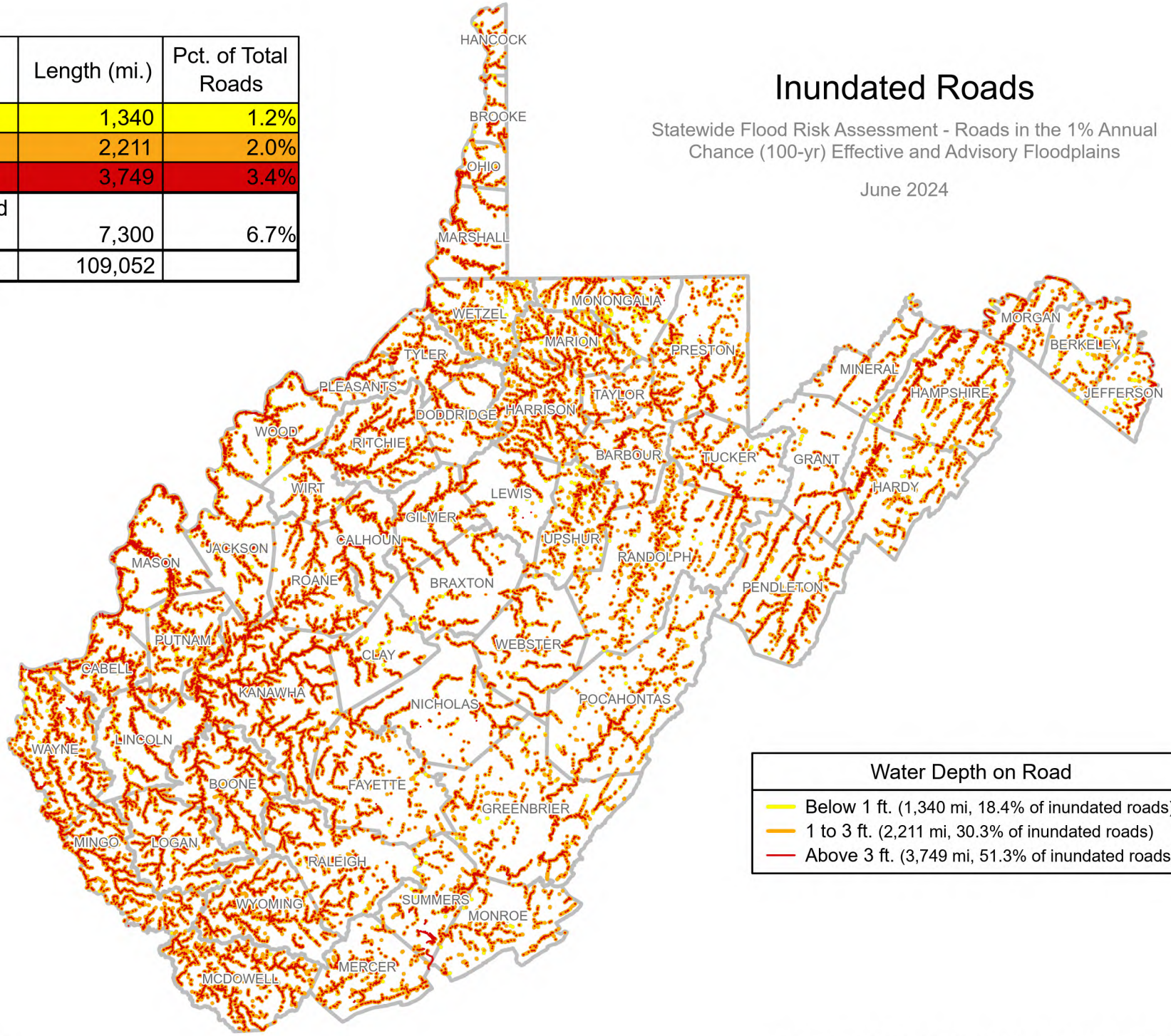
Data Source: 2024-02-27 inundated roads dataset

Inundated Roads

Statewide Flood Risk Assessment - Roads in the 1% Annual Chance (100-yr) Effective and Advisory Floodplains

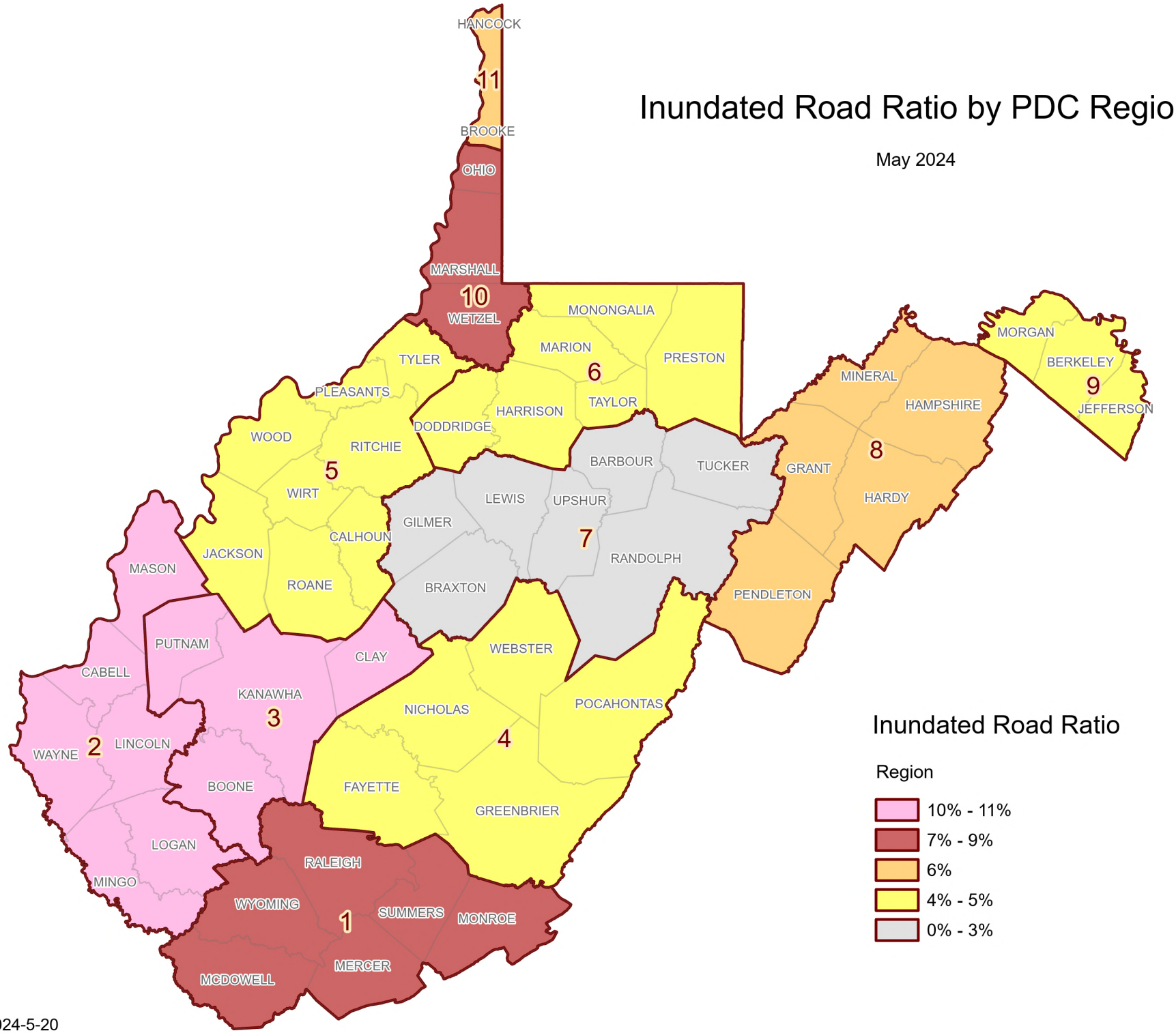
June 2024

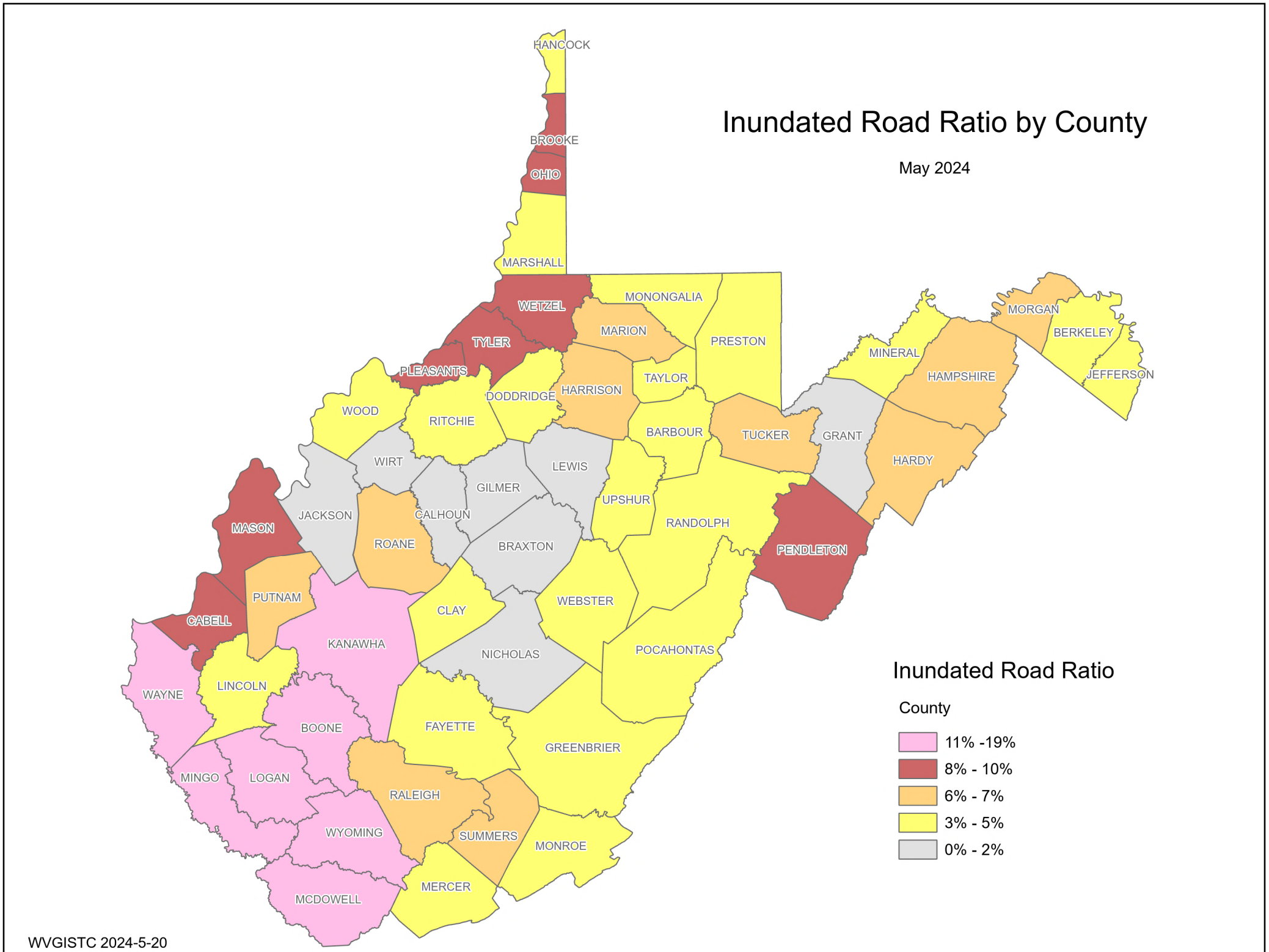
	Length (mi.)	Pct. of Total Roads
Below 1 ft.	1,340	1.2%
1 to 3 ft.	2,211	2.0%
Above 3 ft.	3,749	3.4%
All Inundated Roads	7,300	6.7%
Total Roads	109,052	

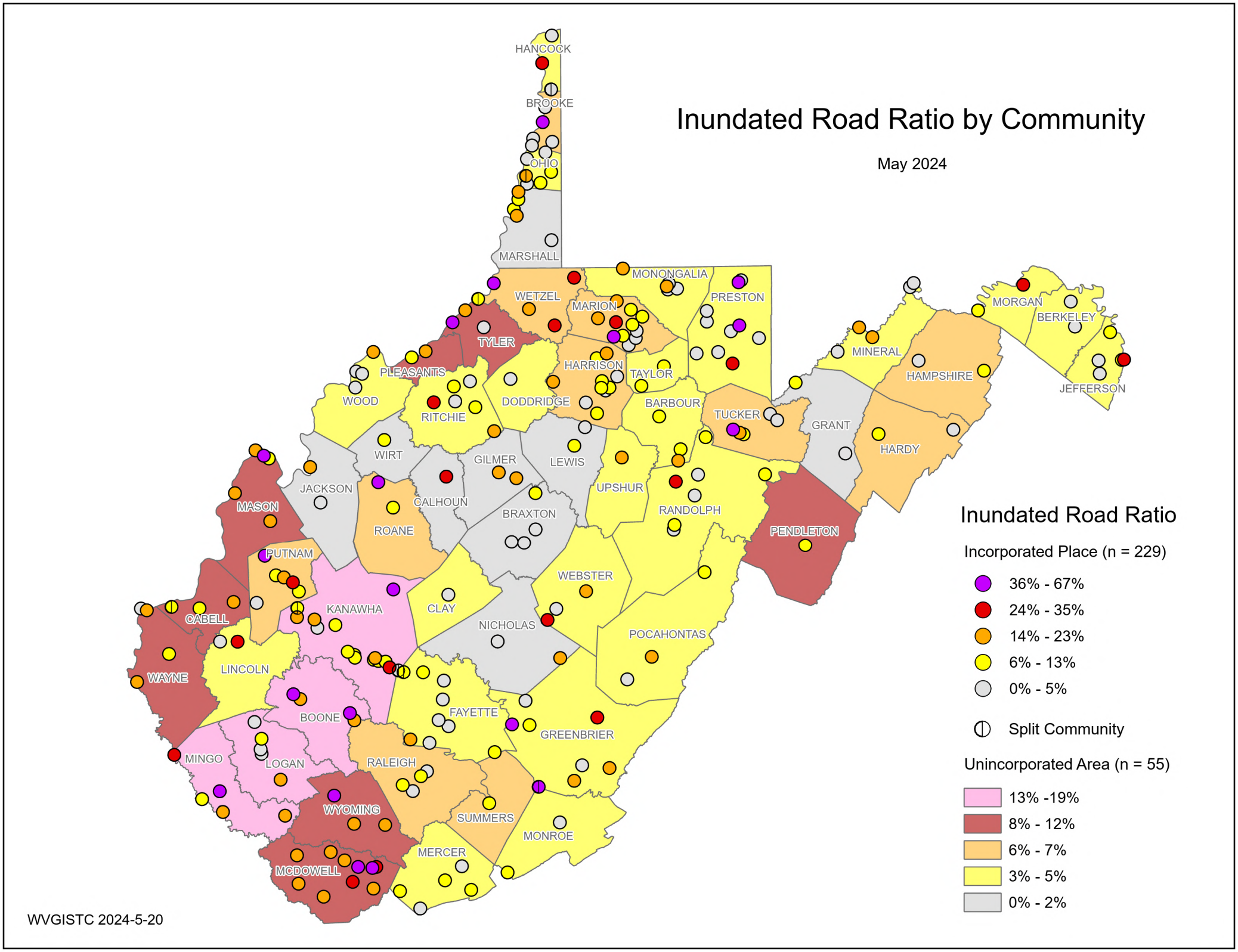


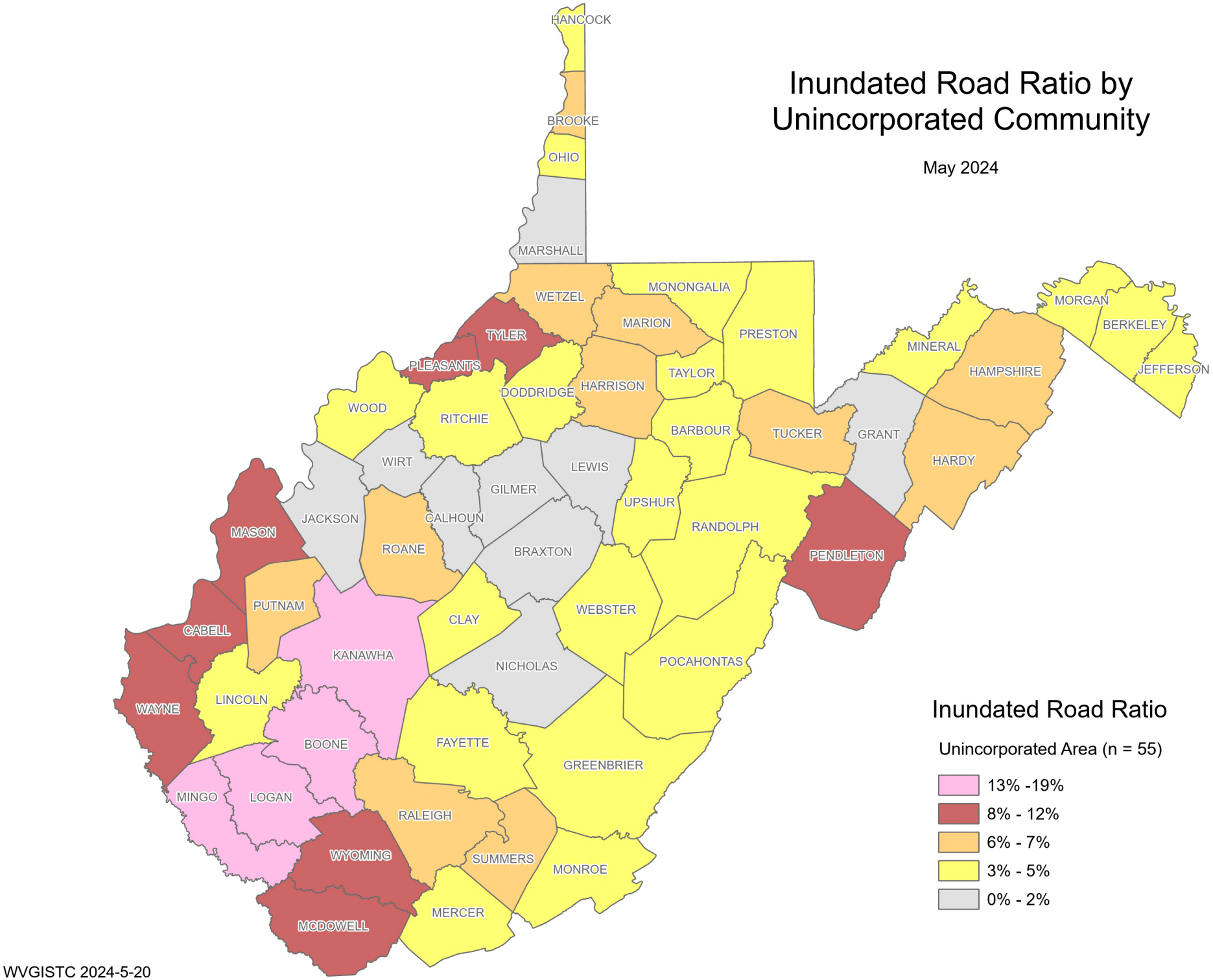
WVGISTC 2024-06-04

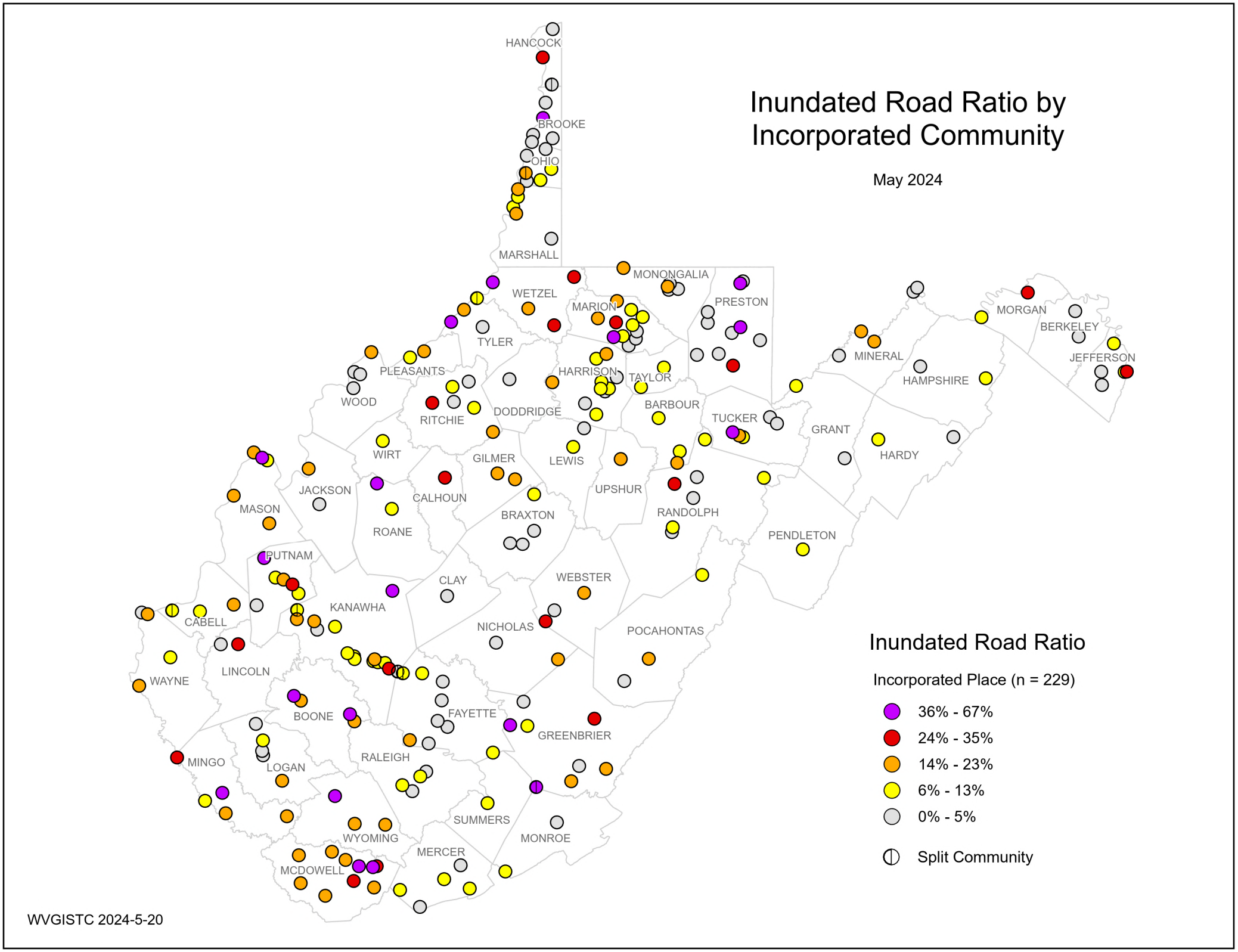
Data Source: Model-backed FEMA and HAZUS flood depth grids


Inundated Road Ratio by PDC Region
May 2024
HANCOCK
11
BROOKE
OHIO
MARSHALL
10
WETZEL
MONONGALIA
MARION
6
PRESTON
TYLER
PLEASANTS
WOOD
RITCHIE
5
WIRT
HARRISON
DODDRIDGE
TAYLOR
BARBOUR
TUCKER
LEWIS
UPSHUR
GILMER
7
RANDOLPH
CALHOUN
JACKSON
ROANE
BRAXTON
MASON
PUTNAM
CABELL
KANAWHA
3
CLAY
WAYNE
2
LINCOLN
BOONE
LOGAN
MINGO
WEBSTER
NICHOLAS
4
POCAHONTAS
FAYETTE
GREENBRIER
RALEIGH
WYOMING
1
SUMMERS
MONROE
MERCER
MCDOWELL
MINERAL
HAMPSHIRE
GRANT
8
HARDY
PENDLETON
MORGAN
BERKELEY
9
JEFFERSON
Inundated Road Ratio
Region
10% - 11%
7% - 9%
6%
4% - 5%
0% - 3%
WVGISTC 2024-5-20


Inundated Road Ratio by County
May 2024
HANCOCK
BROOKE
OHIO
MARSHALL
WETZEL
MONONGALIA
MARION
PRESTON
TYLER
PLEASANTS
TAYLOR
DODDRIDGE
HARRISON
WOOD
RITCHIE
BARBOUR
TUCKER
WIRT
LEWIS
GILMER
UPSHUR
RANDOLPH
JACKSON
CALHOUN
ROANE
BRAXTON
MASON
PUTNAM
CABELL
CLAY
WEBSTER
KANAWHA
NICHOLAS
POCAHONTAS
WAYNE
LINCOLN
BOONE
FAYETTE
GREENBRIER
MINGO
LOGAN
RALEIGH
WYOMING
SUMMERS
MONROE
MERCER
MCDOWELL
MINERAL
MORGAN
BERKELEY
HAMPSHIRE
JEFFERSON
GRANT
HARDY
PENDLETON
Inundated Road Ratio
County
11% -19%
8% - 10%
6% - 7%
3% - 5%
0% - 2%
WVGISTC 2024-5-20


Inundated Road Ratio by Community
May 2024
HANCOCK
BROOKE
OHIO
MARSHALL
WETZEL
MONONGALIA
MARION
PRESTON
TYLER
PLEASANTS
HARRISON
TAYLOR
WOOD
DODDRIDGE
BARBOUR
RITCHIE
TUCKER
GRANT
MINERAL
HAMPSHIRE
MORGAN
BERKELEY
JEFFERSON
HARDY
WIRT
GILMER
LEWIS
JACKSON
UPSHUR
CALHOUN
BRAXTON
RANDOLPH
MASON
ROANE
PENDLETON
PUTNAM
WEBSTER
KANAWHA
CLAY
NICHOLAS
POCAHONTAS
CABELL
WAYNE
LINCOLN
BOONE
FAYETTE
GREENBRIER
MINGO
LOGAN
RALEIGH
WYOMING
SUMMERS
MONROE
MERCER
MCDOWELL
Inundated Road Ratio
Incorporated Place (n = 229)
36% - 67%
24% - 35%
14% - 23%
6% - 13%
0% - 5%
Split Community
Unincorporated Area (n = 55)
13% -19%
8% - 12%
6% - 7%
3% - 5%
0% - 2%
WVGISTC 2024-5-20


Inundated Road Ratio by
Unincorporated Community
May 2024
HANCOCK
BROOKE
OHIO
MARSHALL
WETZEL
MONONGALIA
MARION
PRESTON
TYLER
PLEASANTS
TAYLOR
HARRISON
DODDRIDGE
WOOD
RITCHIE
BARBOUR
TUCKER
GRANT
MINERAL
HAMPSHIRE
MORGAN
BERKELEY
JEFFERSON
HARDY
WIRT
LEWIS
GILMER
UPSHUR
RANDOLPH
JACKSON
CALHOUN
MASON
ROANE
BRAXTON
PENDLETON
PUTNAM
CLAY
WEBSTER
CABELL
KANAWHA
NICHOLAS
POCAHONTAS
WAYNE
LINCOLN
BOONE
FAYETTE
GREENBRIER
MINGO
LOGAN
RALEIGH
WYOMING
SUMMERS
MONROE
MERCER
MCDOWELL
Inundated Road Ratio
Unincorporated Area (n = 55)
13% -19%
8% - 12%
6% - 7%
3% - 5%
0% - 2%
WVGISTC 2024-5-20

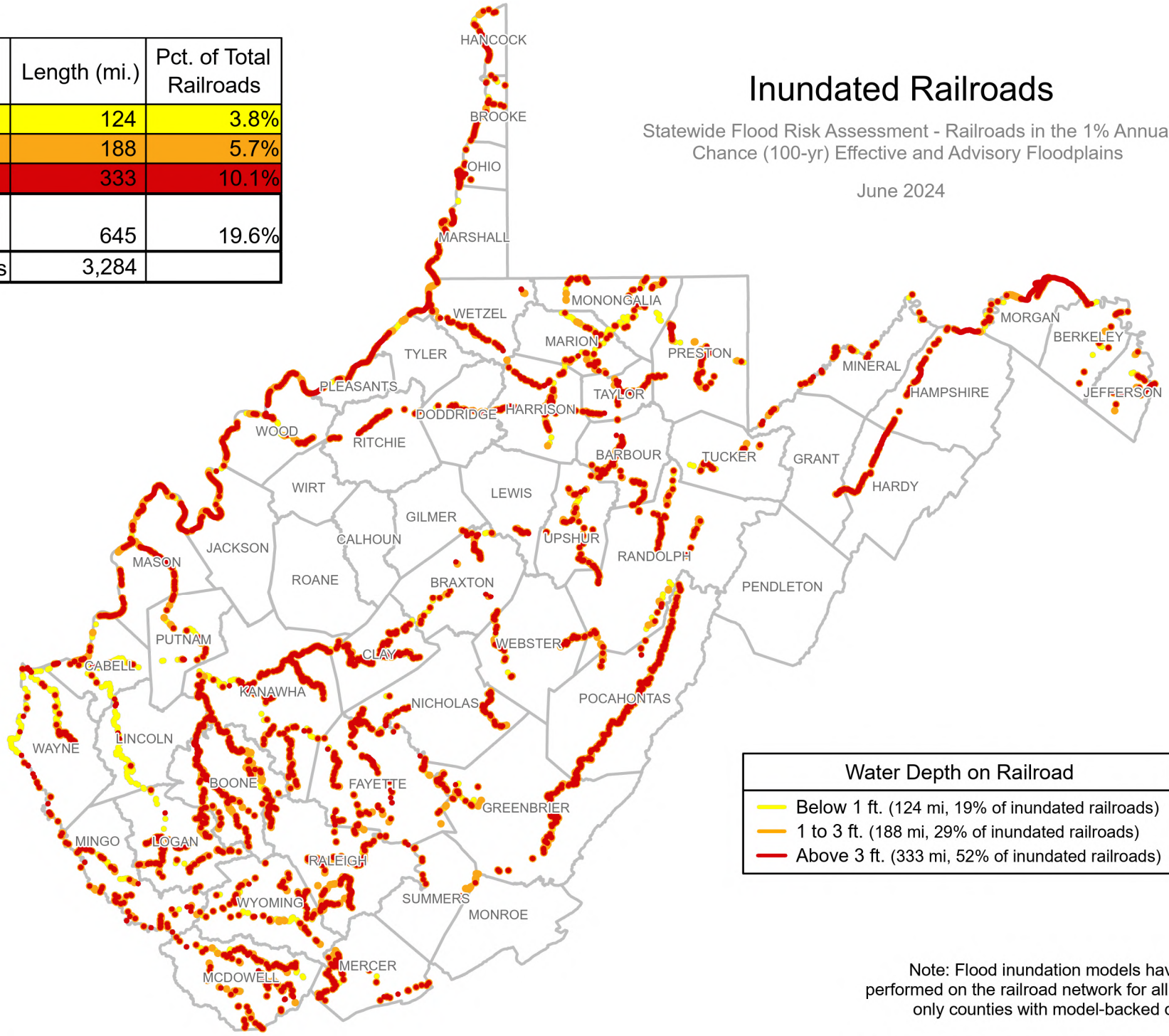

Inundated Road Ratio by Incorporated Community
May 2024
HANCOCK
BROOKE
OHIO
MARSHALL
MONONGALIA
WETZEL
MARION
PRESTON
TYLER
PLEASANTS
HARRISON
TAYLOR
WOOD
RITCHIE
DODDRIDGE
BARBOUR
TUCKER
GRANT
HARDY
MINERAL
HAMPSHIRE
MORGAN
BERKELEY
JEFFERSON
WIRT
GILMER
LEWIS
UPSHUR
RANDOLPH
JACKSON
CALHOUN
BRAXTON
MASON
ROANE
PENDLETON
PUTNAM
CLAY
WEBSTER
KANAWHA
CABELL
NICHOLAS
POCAHONTAS
WAYNE
LINCOLN
BOONE
FAYETTE
GREENBRIER
MINGO
LOGAN
RALEIGH
SUMMERS
MONROE
WYOMING
MERCER
MCDOWELL
Inundated Road Ratio
Incorporated Place (n = 229)
36% - 67%
24% - 35%
14% - 23%
6% - 13%
0% - 5%
Split Community
WVGISTC 2024-5-20

Inundated Railroads

Statewide Flood Risk Assessment - Railroads in the 1% Annual Chance (100-yr) Effective and Advisory Floodplains

June 2024

	Length (mi.)	Pct. of Total Railroads
Below 1 ft.	124	3.8%
1 to 3 ft.	188	5.7%
Above 3 ft.	333	10.1%
All Inundated Railroads	645	19.6%
Total Railroads	3,284	



Water Depth on Railroad

- Below 1 ft. (124 mi, 19% of inundated railroads)
- 1 to 3 ft. (188 mi, 29% of inundated railroads)
- Above 3 ft. (333 mi, 52% of inundated railroads)

Note: Flood inundation models have not been performed on the railroad network for all counties—only counties with model-backed depth grids.

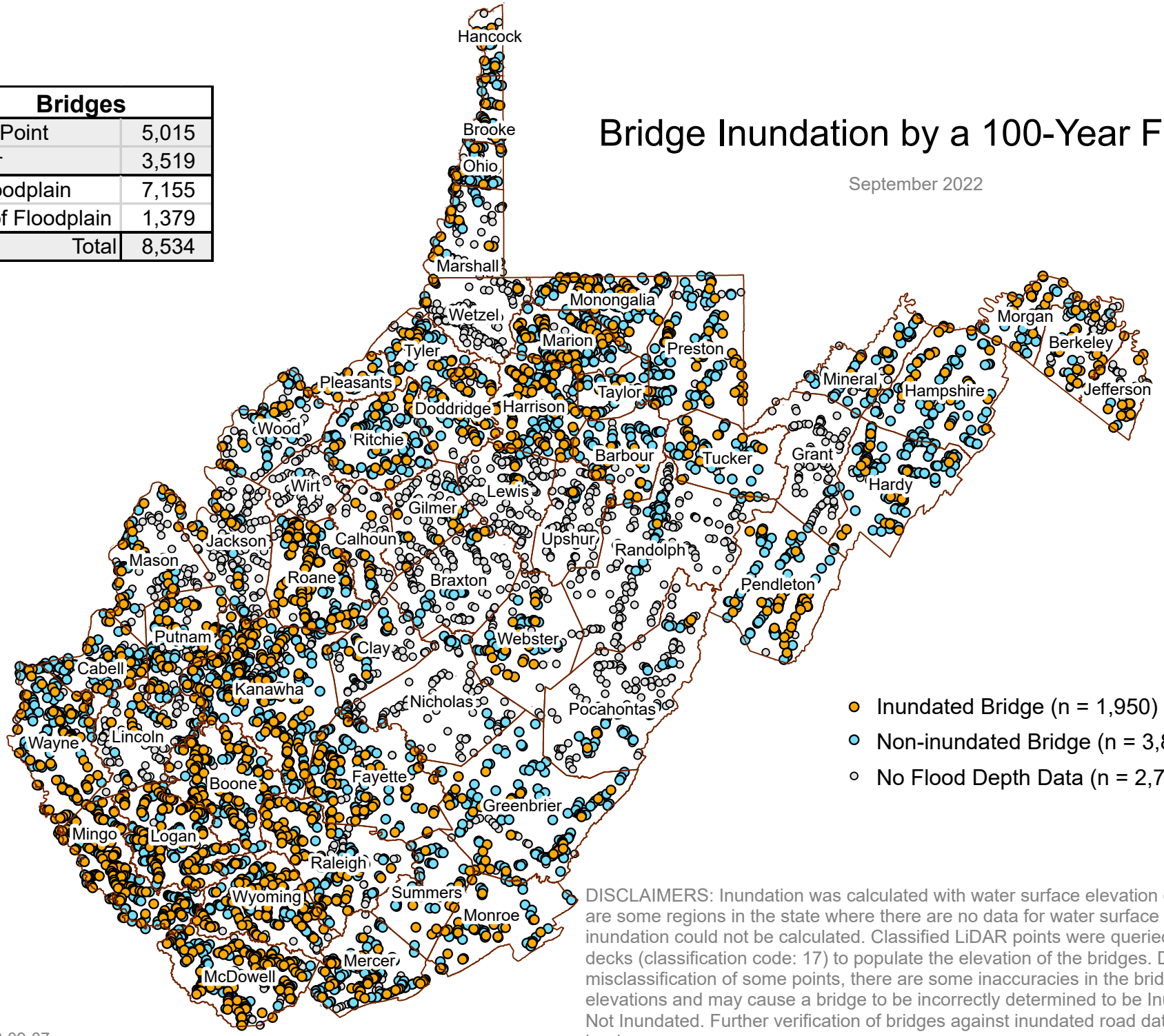
WVGISTC 2024-06-04

Data Source: Model-backed FEMA flood depth grids

Bridge Inundation by a 100-Year Flood

September 2022

Bridges	
DOT Point	5,015
Other	3,519
In Floodplain	7,155
Out of Floodplain	1,379
Total	8,534



- Inundated Bridge (n = 1,950)
- Non-inundated Bridge (n = 3,847)
- No Flood Depth Data (n = 2,737)

DISCLAIMERS: Inundation was calculated with water surface elevation data. There are some regions in the state where there are no data for water surface elevation, so inundation could not be calculated. Classified LiDAR points were queried for bridge decks (classification code: 17) to populate the elevation of the bridges. Due to misclassification of some points, there are some inaccuracies in the bridge deck elevations and may cause a bridge to be incorrectly determined to be Inundated or Not Inundated. Further verification of bridges against inundated road data needs to be done.

WVGISTC 2022-09-07