
NATIVE AMERICAN
AGRICULTURE FUND

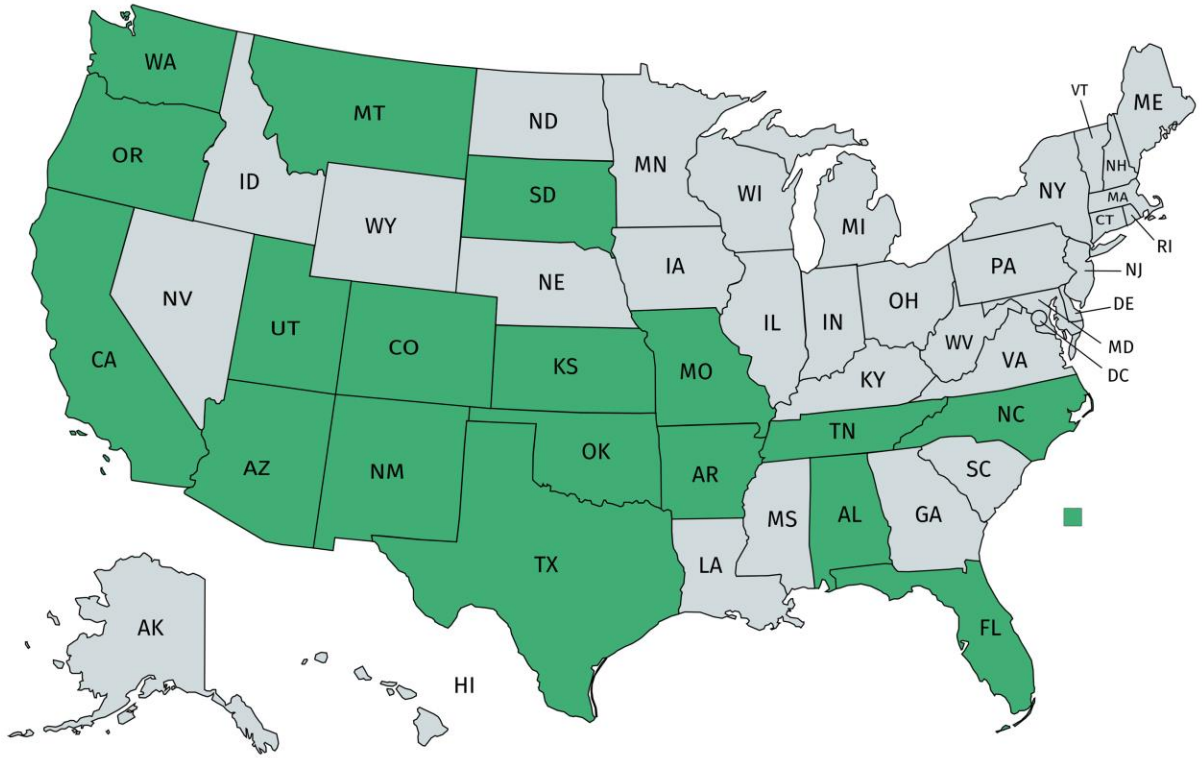
Native American Agriculture Fund (NAAF)

Agricultural Census Webinar

States of Interest

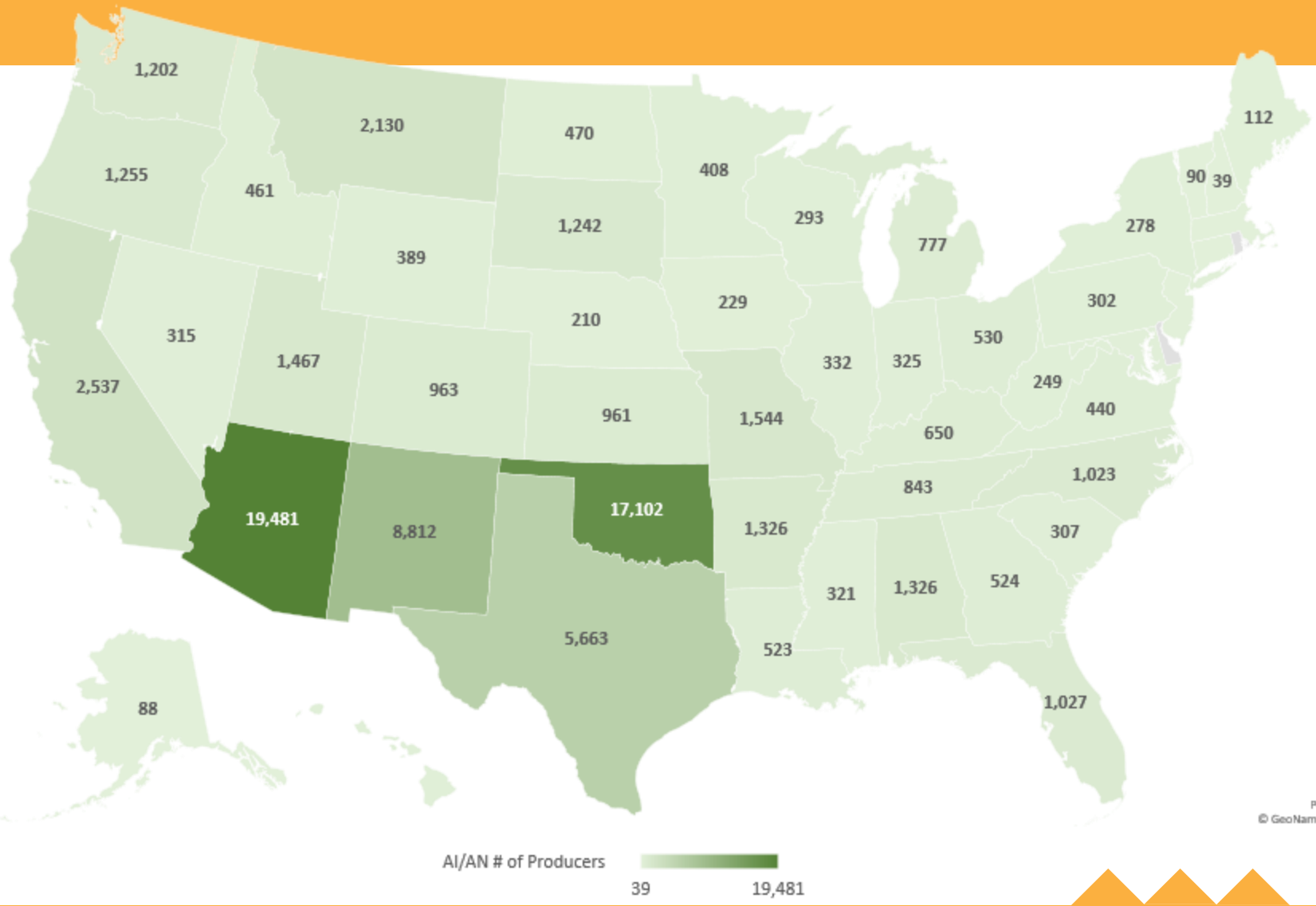
States with AI/AN populations over 1% of overall AI/AN population

- Alabama
- Arizona
- Arkansas
- California
- Colorado
- Florida
- Kansas
- Missouri
- Montana
- New Mexico
- North Carolina
- Oklahoma
- Oregon
- South Dakota
- Tennessee
- Texas
- Utah
- Washington



Number of American Indian/ Alaskan Native Producers by State

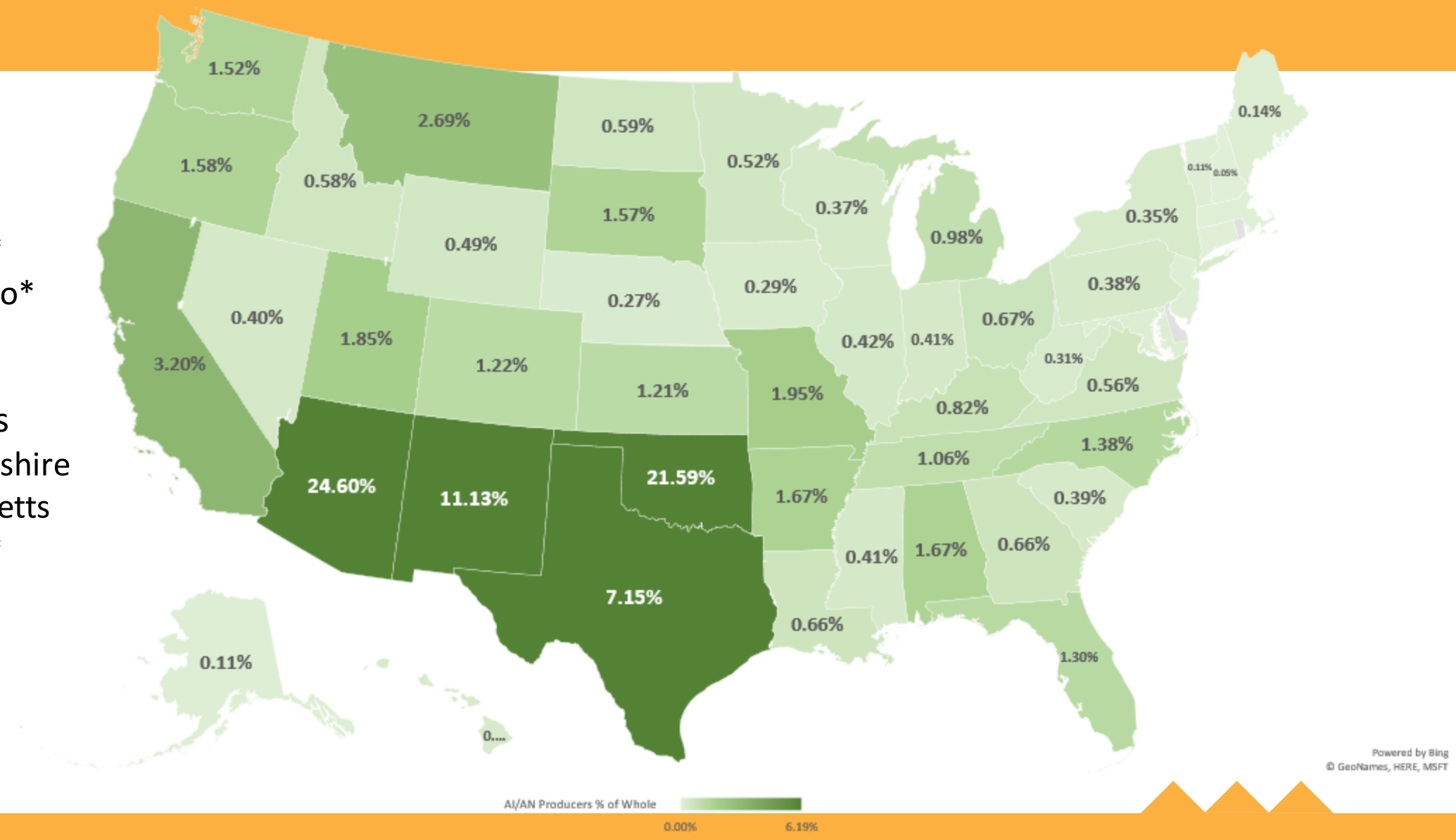
- High concentration in 4 states
  - New Mexico*
  - Arizona*
  - Oklahoma*
  - Texas*



Percent of AI/AN Producers by State Relative to Overall AI/AN Producer Population

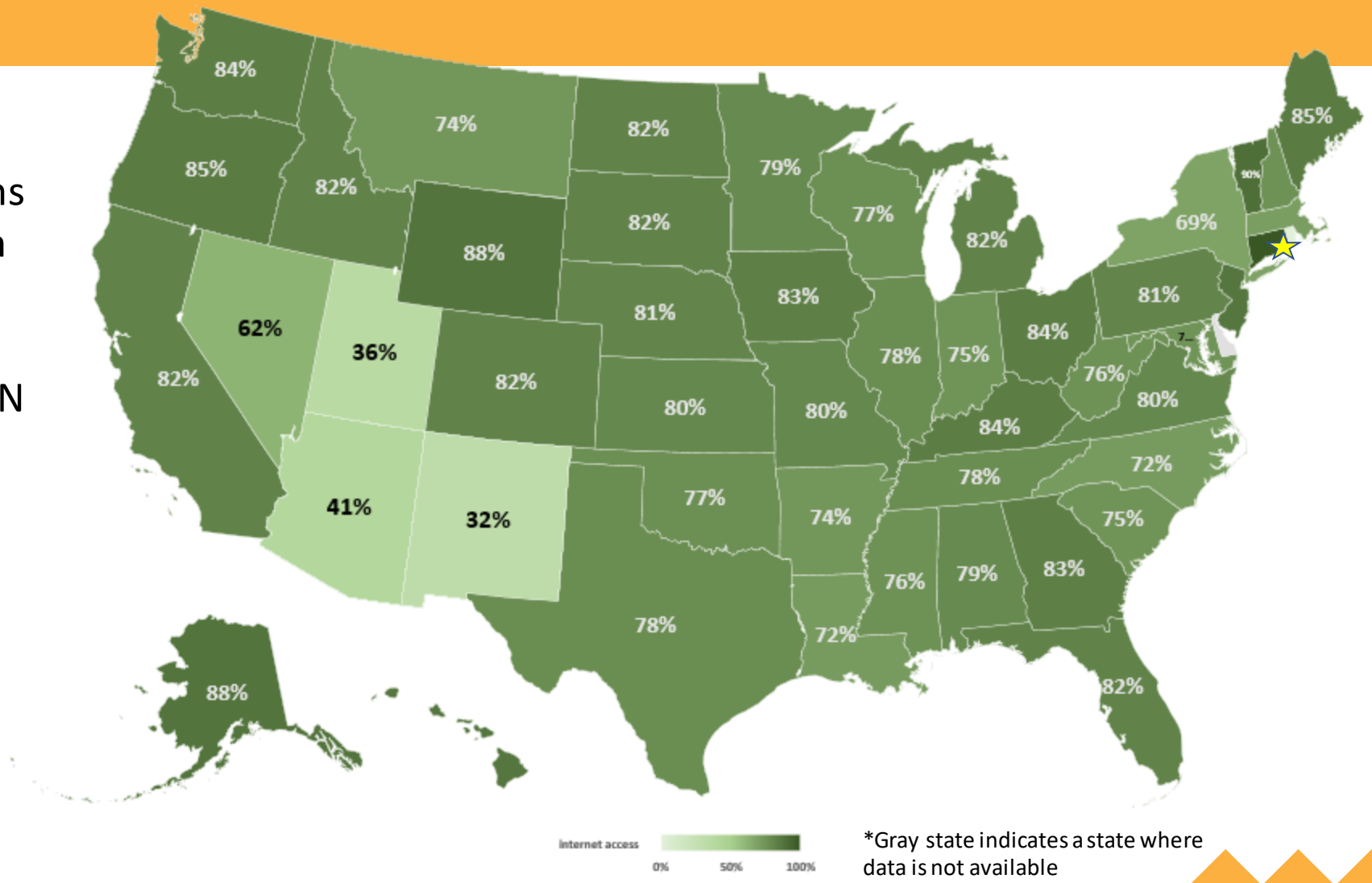
- Top 3 States
  - Arizona*
  - Oklahoma*
  - New Mexico*

- Lowest 3 States
  - New Hampshire
  - Massachusetts
  - Tennessee*



Percent of Farms with AI/AN Producers Internet Accessibility by State

- On average 66% of farms with AI/AN producers in US have internet access
- States with largest AI/AN producer populations, have lowest internet accessibility

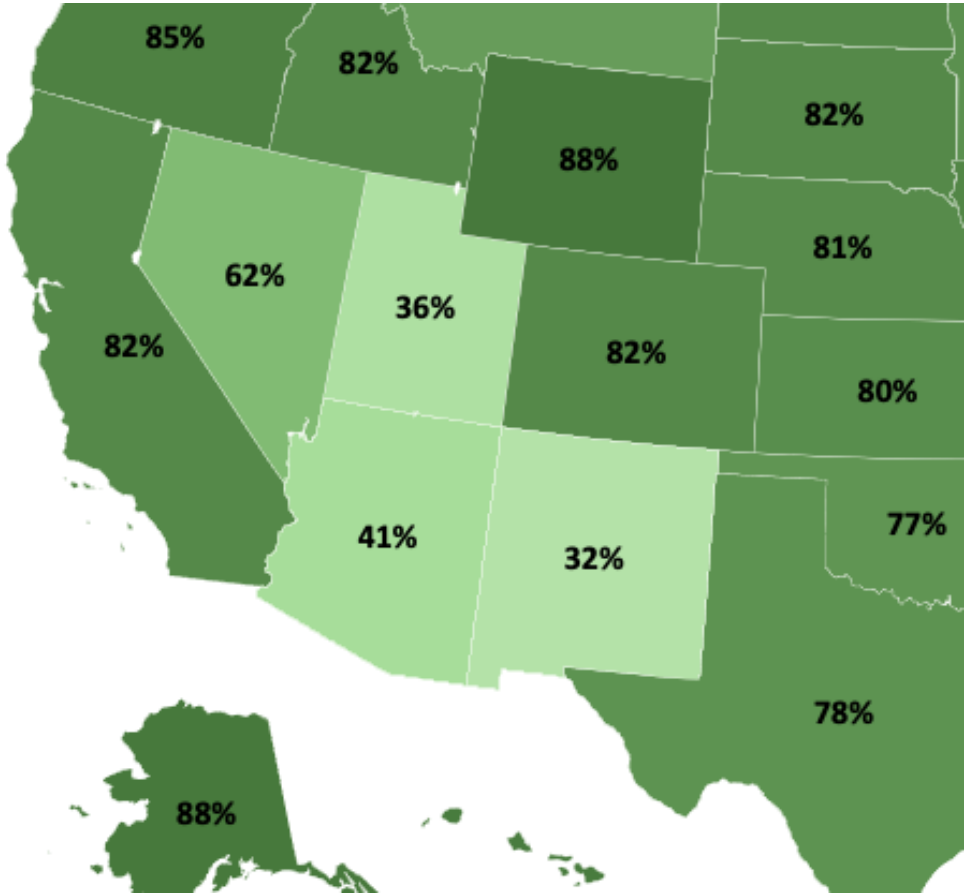


*Gray state indicates a state where data is not available

Farms With Internet Access Among AI/AN Producers in the Southwest Region

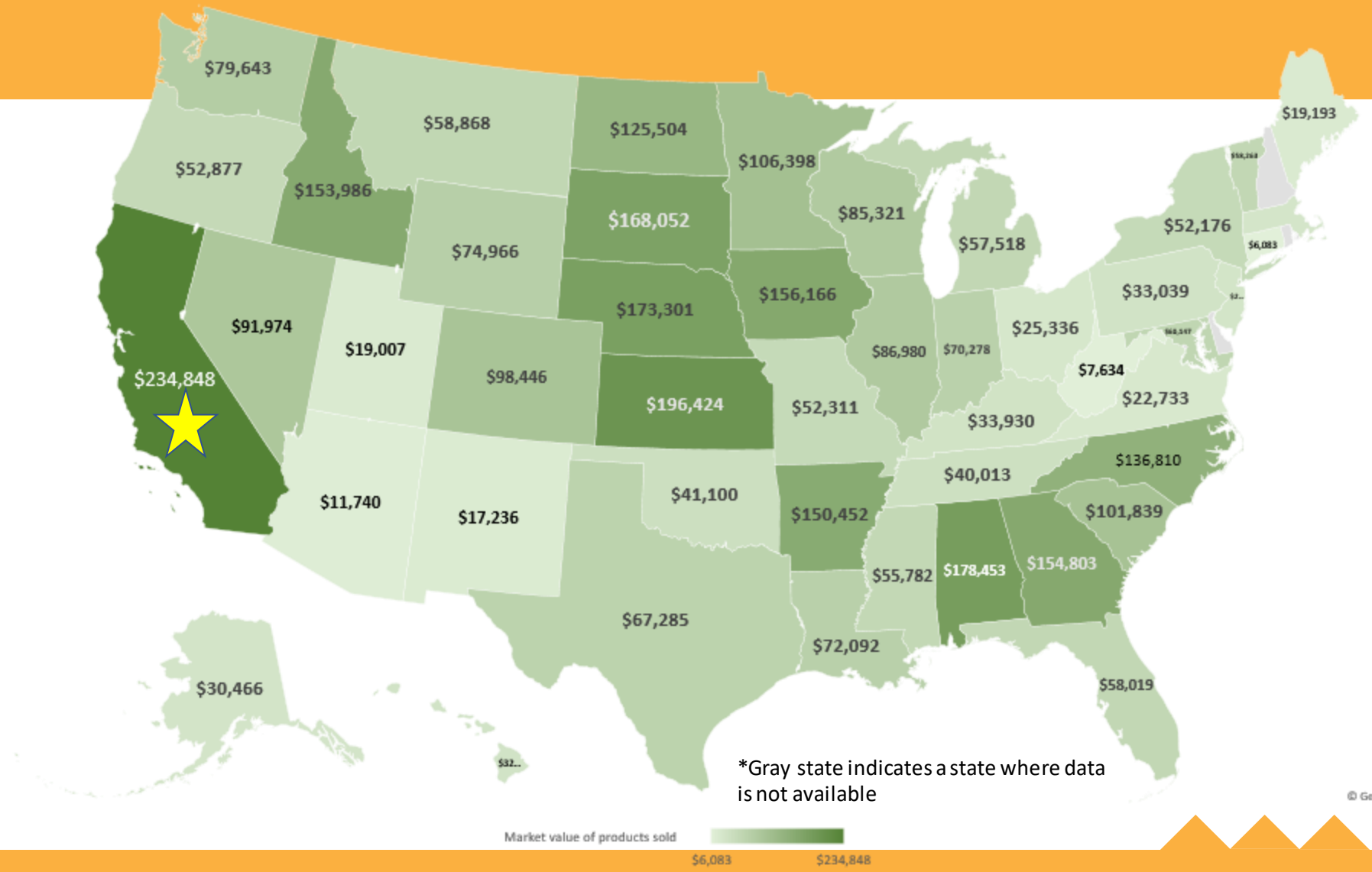
- Important for farms to have internet access
  - Gathering information
    - Big data
  - Looking for jobs or employees
  - Participate in the world's changing economy
    - New technologies (precision farming) require internet access

- Farms in Southwest region have very low internet access



Average Market Value of Product Sold Per Farm With AI/AN Producers by State

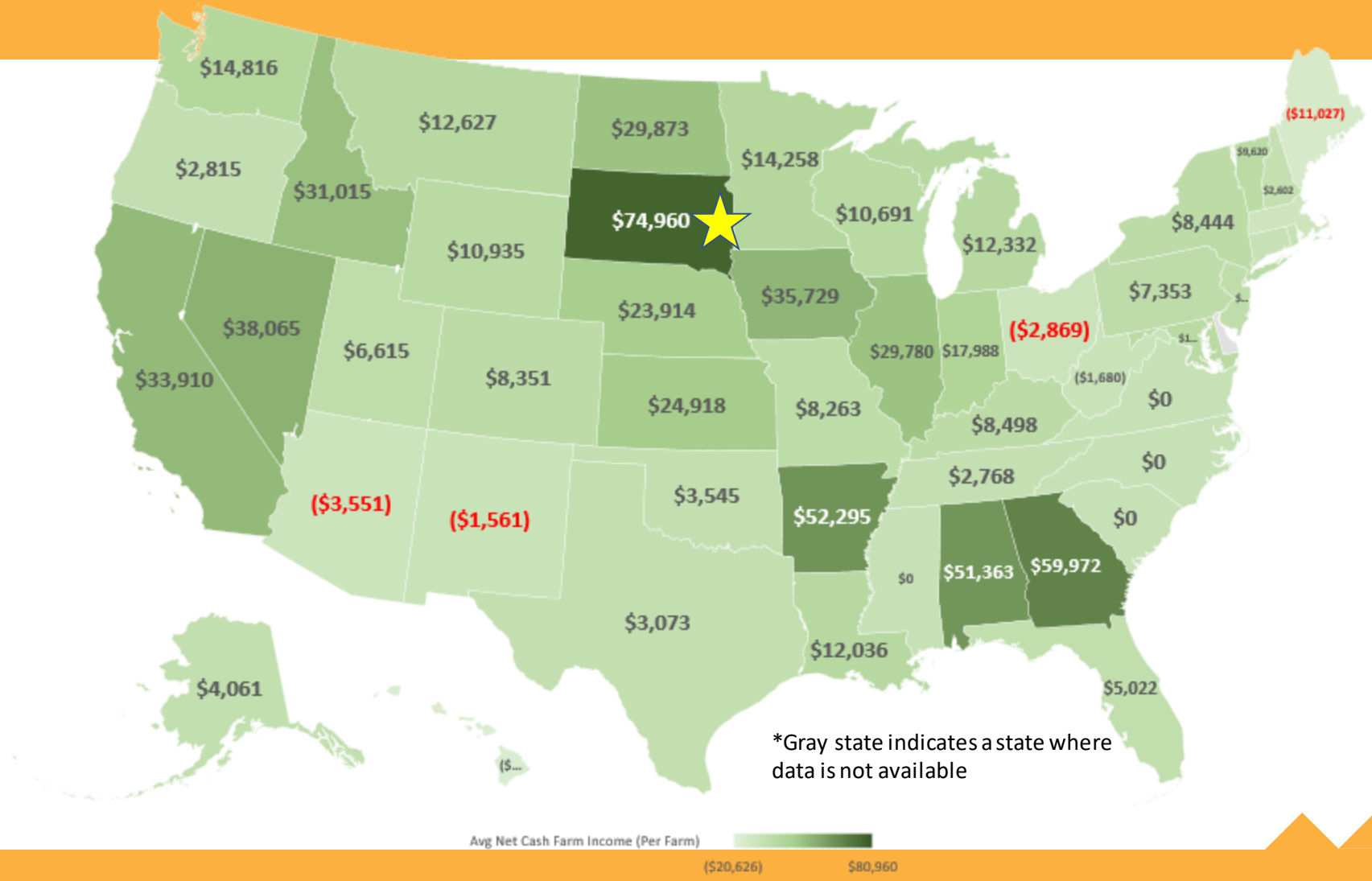
- California* has the highest average market value
- States of interest with high numbers of AI/AN producers have lowest average market values



Average Net Cash Farm Income Per Farm with AI/AN Producers by State

NFI= Cash Receipts From Farming and Farm-Related Income + Government Payments - Cash Expenses

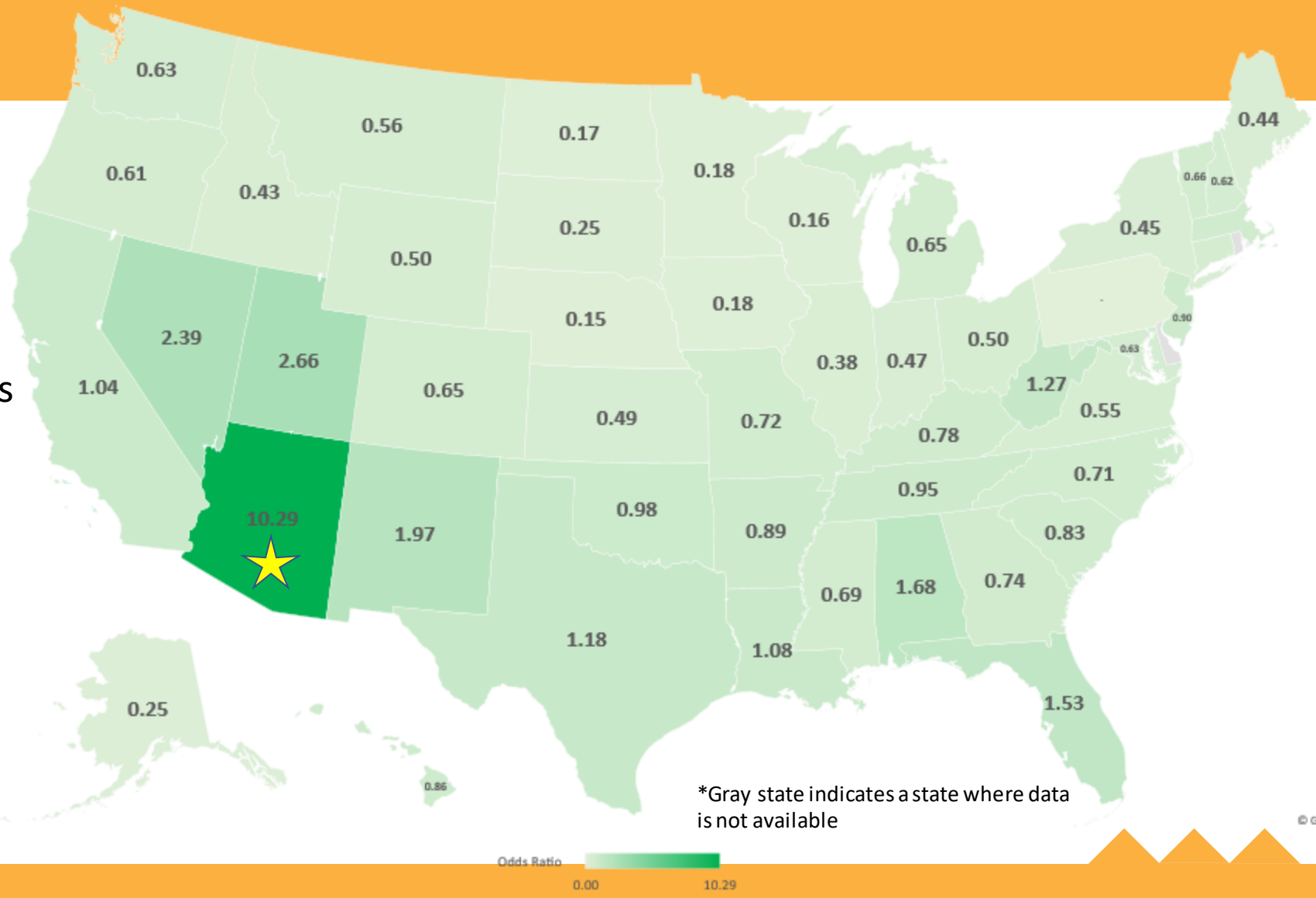
- South Dakota* has the top average per farm net cash farm income
- Many states of interest have negative net cash farm income



AI/AN Odds Ratio by State

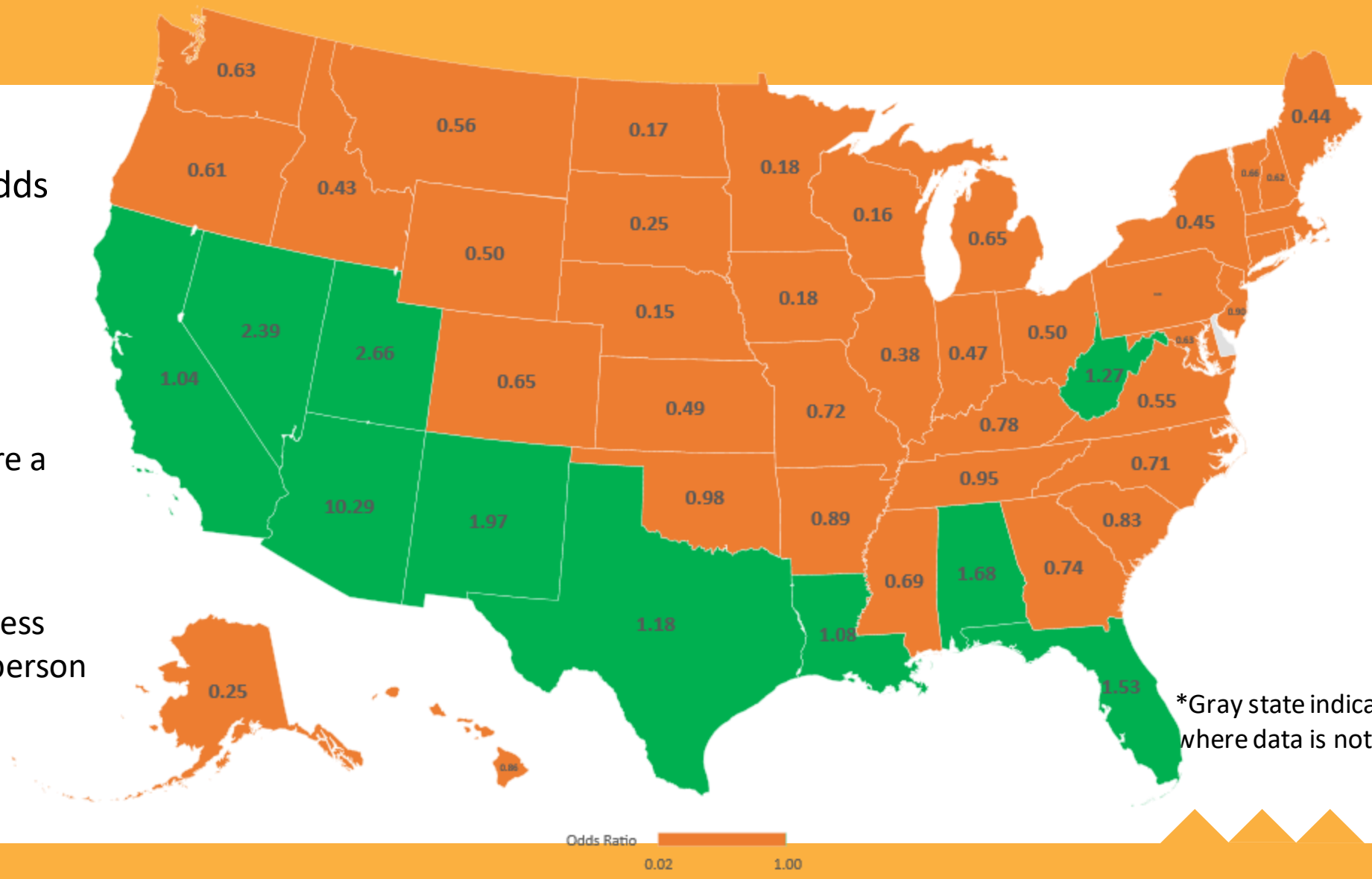
Odds Ratio= % of AI/AN Producer Population by State / % of Overall AI/AN Population by State

- The odds ratio tells how likely or unlikely it is that you are an AI/AN person if you are a producer
- The U.S. has an overall odds ratio of 1.35
- 6 states rank above 1.35
  - Arizona*
  - Utah*
  - Nevada
  - New Mexico*
  - Alabama*
  - Florida*



AI/AN Odds Ratio Above or Below 1 by State

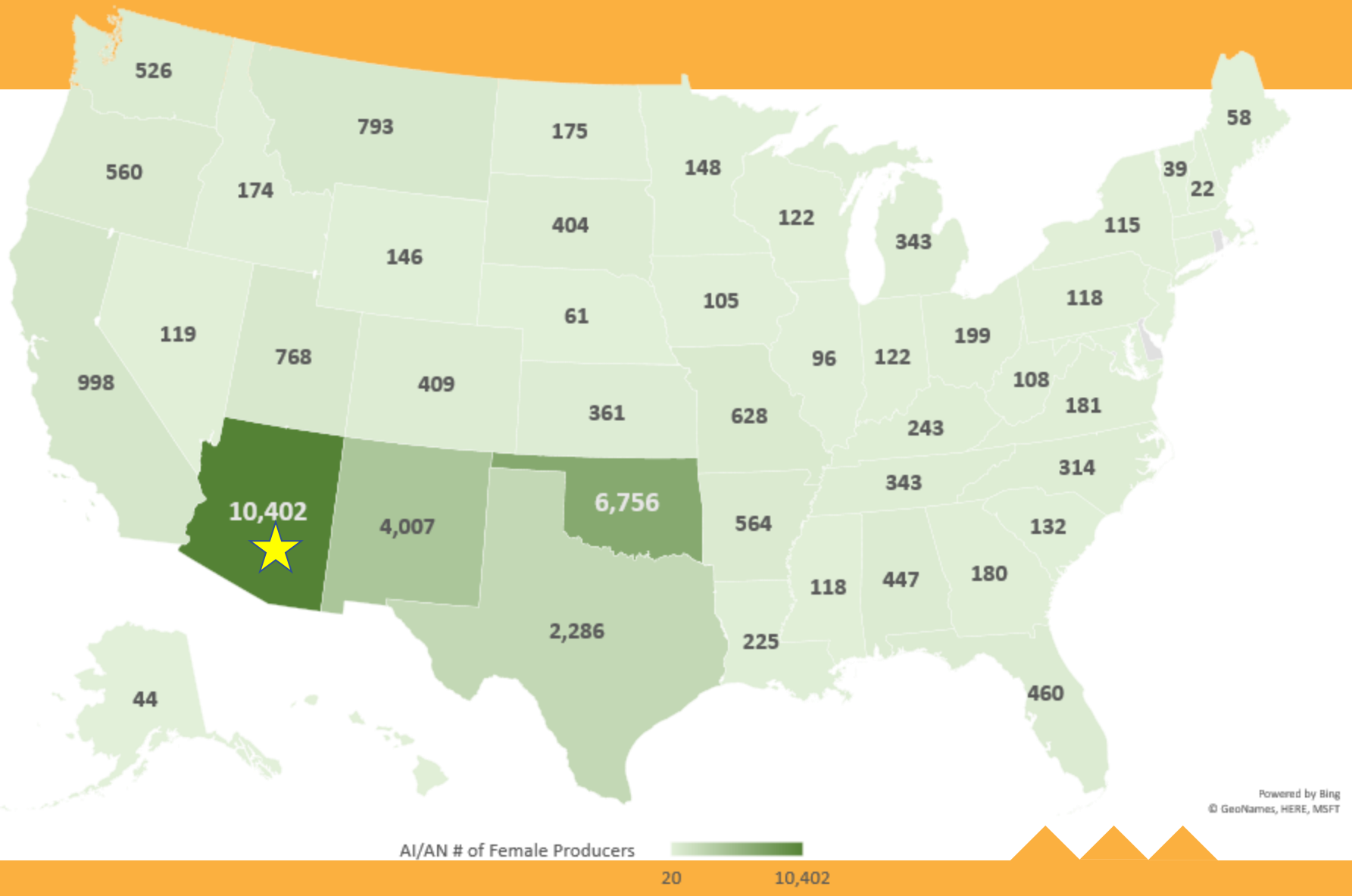
- 10 states have an odds ratio above 1
- Odds Ratio Above 1= more likely to be an AI/AN person if you are a producer
- Odds Ratio Below 1= less likely to be an AI/AN person if you are a producer



*Gray state indicates a state where data is not available

Number of AI/AN Female Producers by State

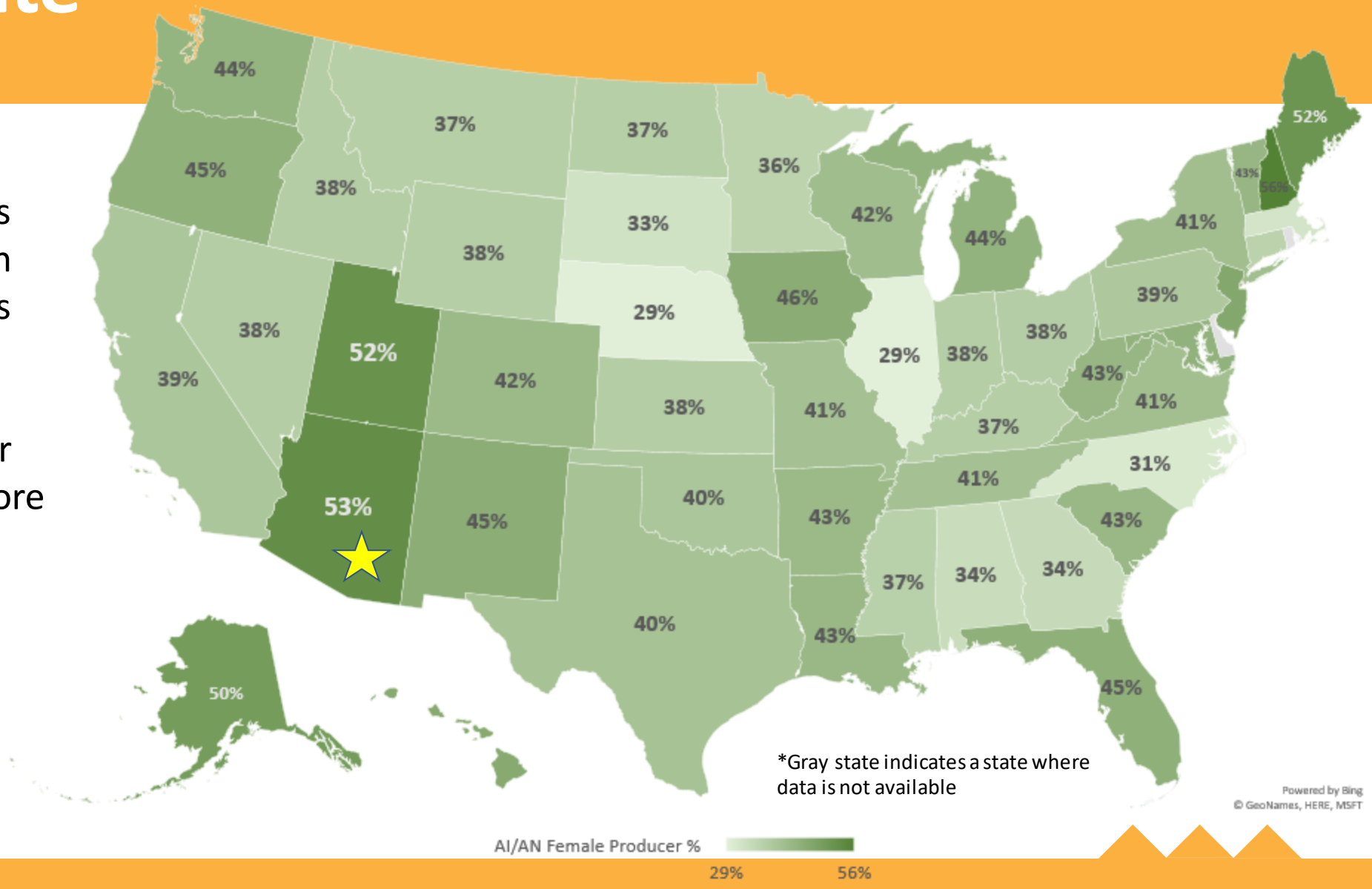
- Arizona* has the largest number of female AI/AN producers



Percent of AI/AN Female Producers by State

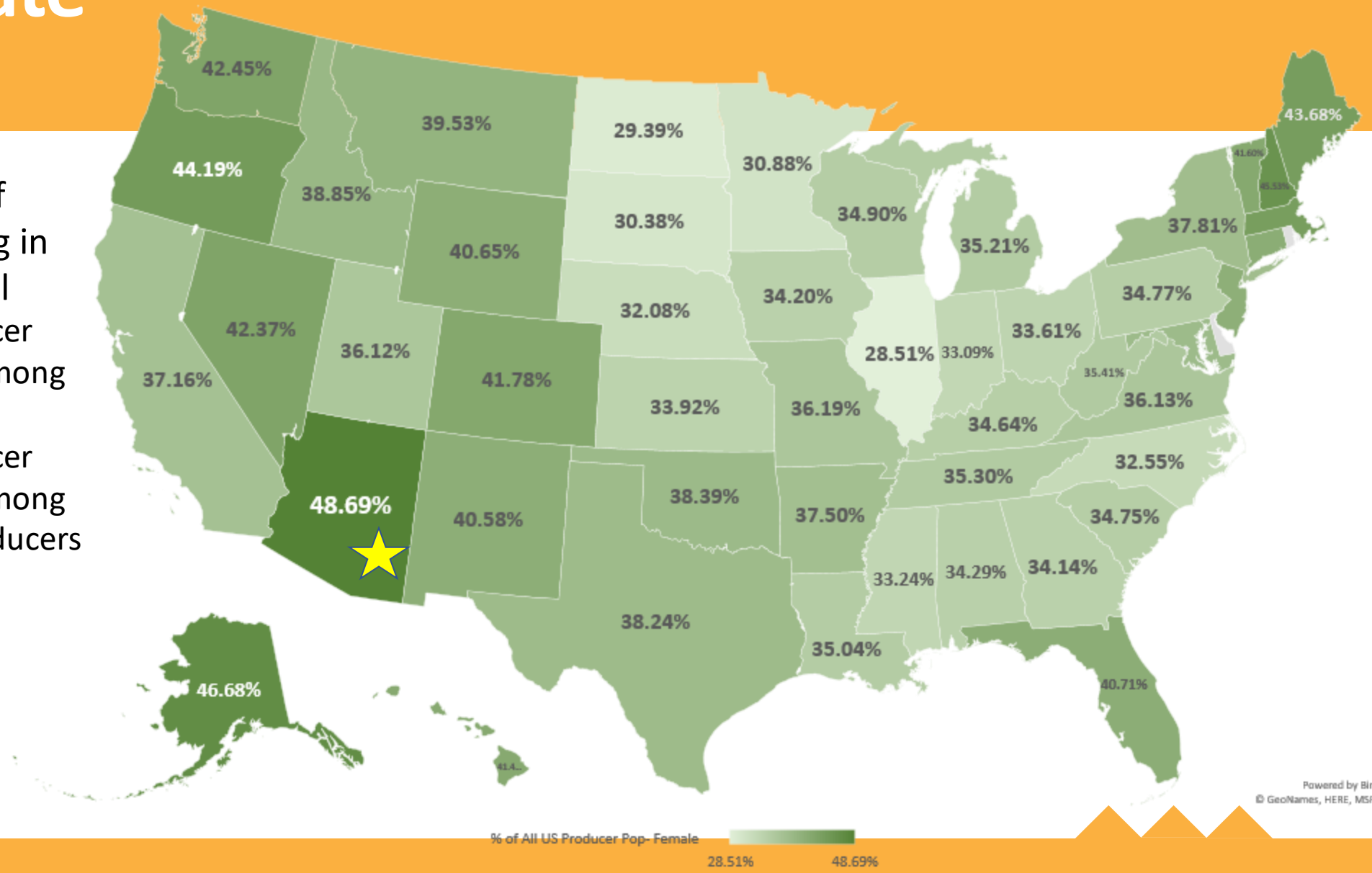
- Female AI/AN producers are underrepresented in Illinois and the US plains region

- 5 states' AI/AN producer population is 50% or more female
  - Arizona*
  - Utah*
  - Alaska
  - Maine
  - New Hampshire



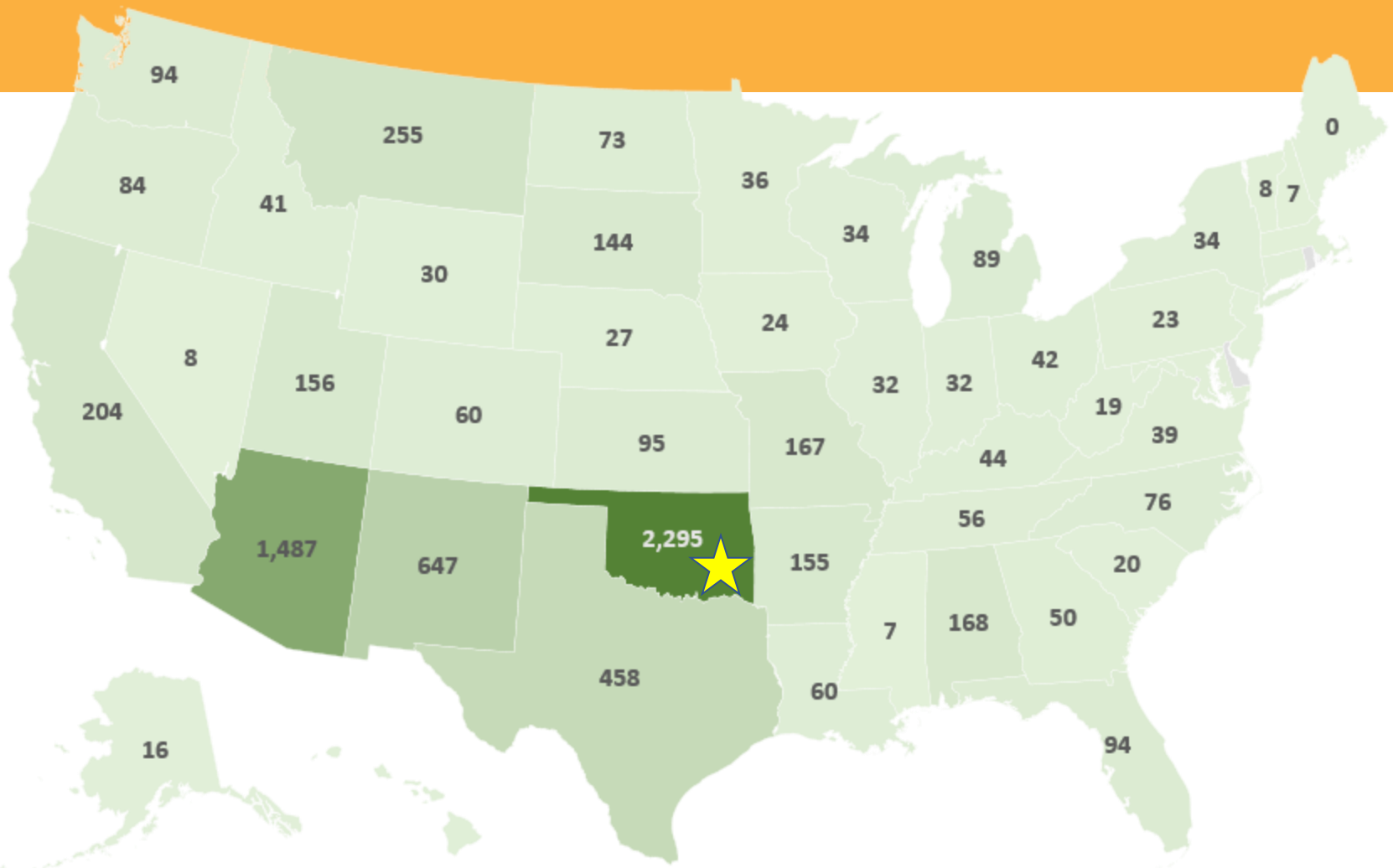
Percent of All US Female Producers by State

- Higher representation of AI/AN females in farming in comparison to US overall
  - Largest female producer population percent among all US farms is 49%
  - Largest female producer population percent among farms with AI/AN producers is 53%

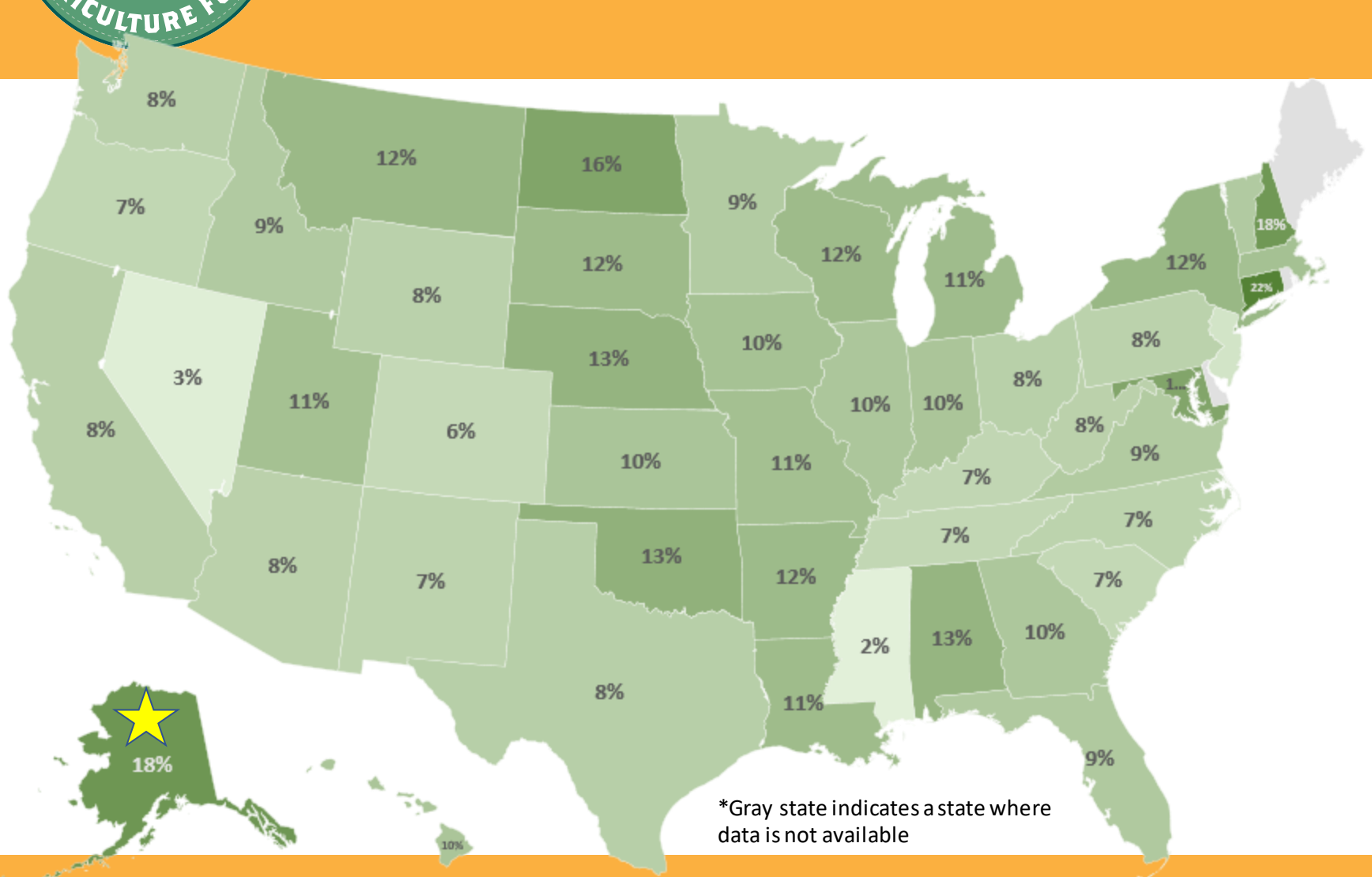


Number of AI/AN Producers Under 35 Years of Age by State

- Top 3 States
  - Oklahoma*
  - Arizona*
  - New Mexico*



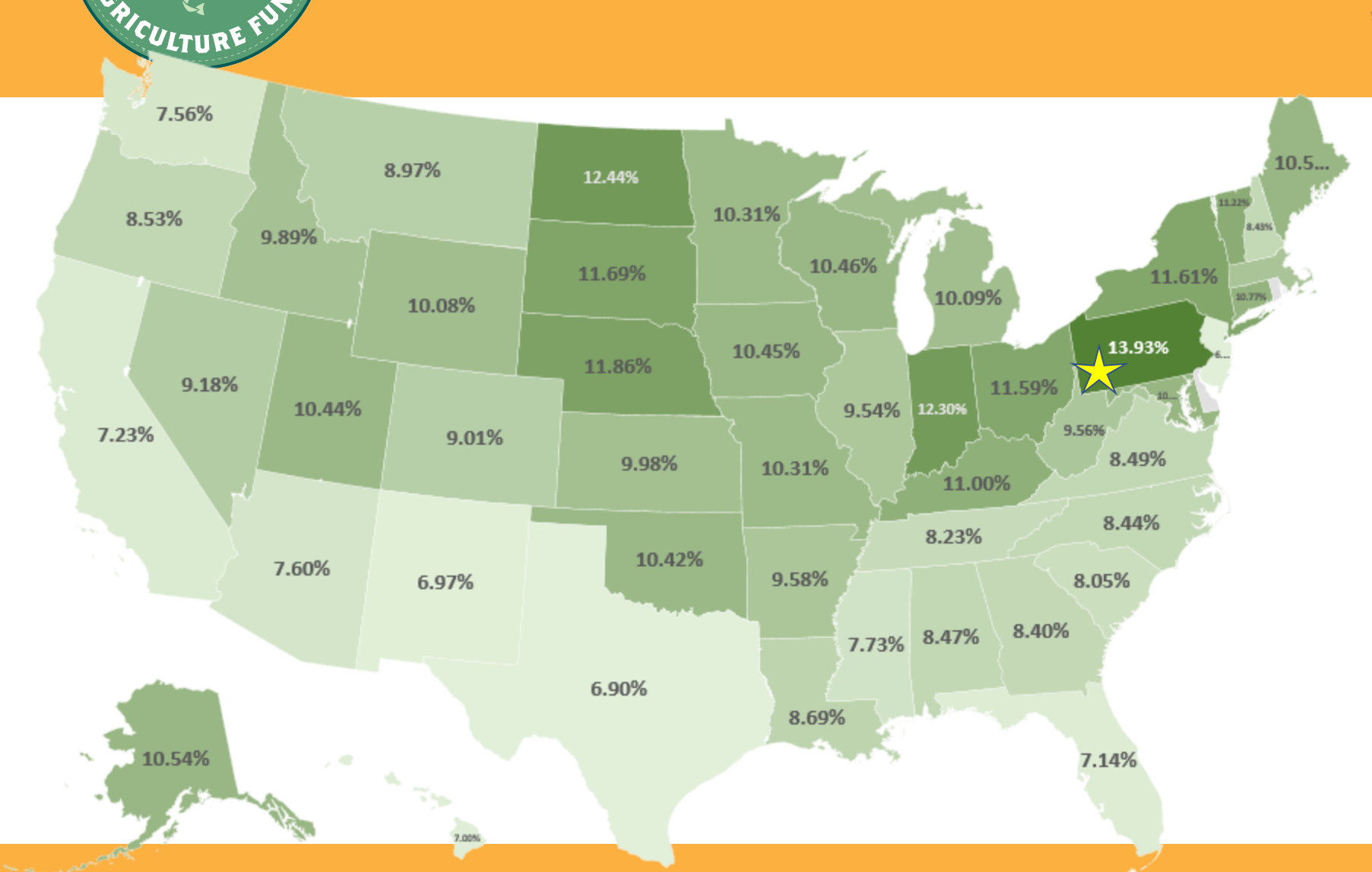
Percent of AI/AN Producers Under the Age of 35 by State



- Top States of Interest
  - Oklahoma*
  - Alabama*

- Lowest States of Interest
  - Oregon*
  - New Mexico*
  - North Carolina*
  - Tennessee*

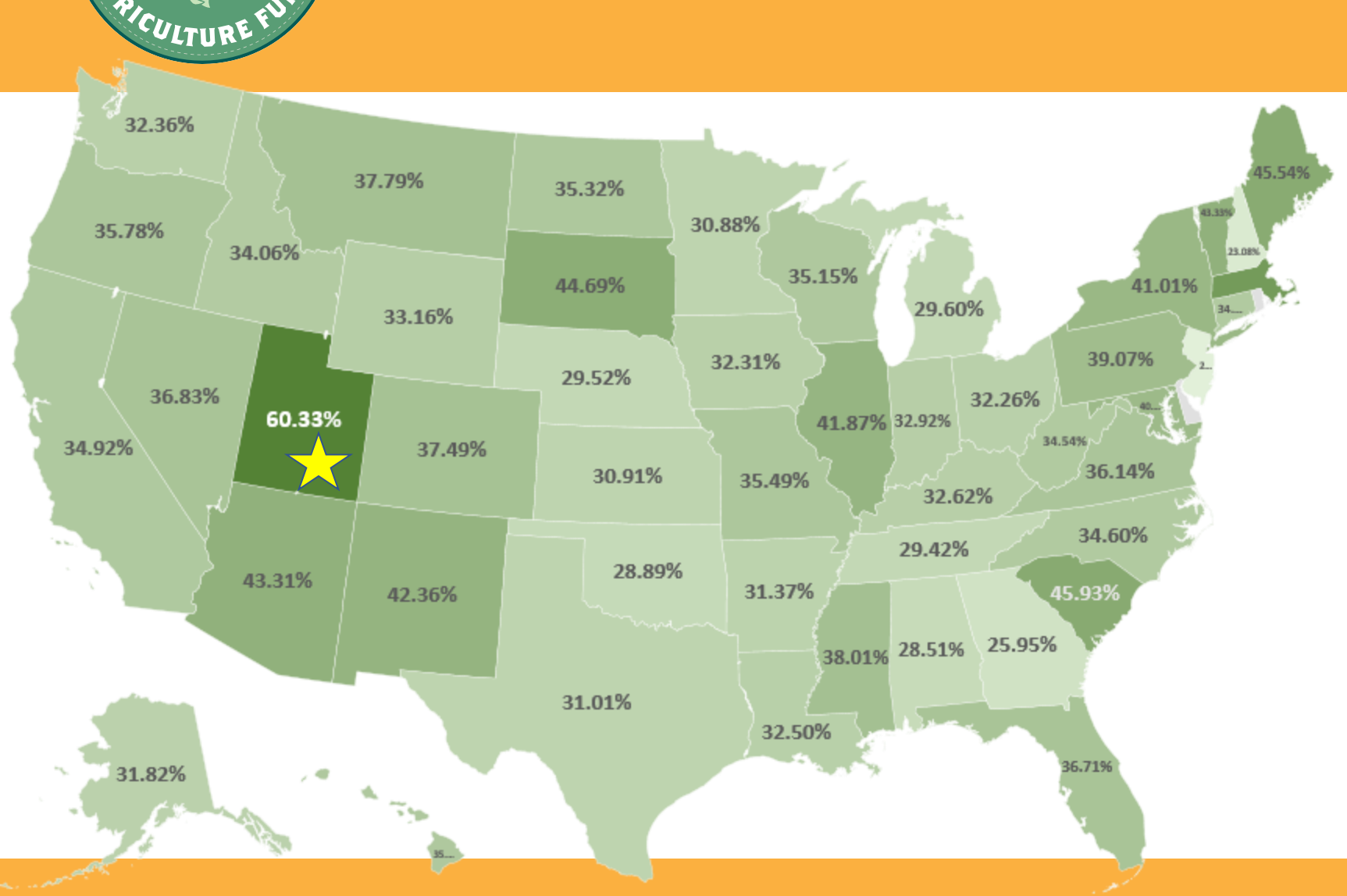
Percent of All US Producers Under 35 Years Old by State



- Appears that young producers are more involved among farms with AI/AN producers
  - Largest young producer population percent among farms with AI/AN producers is 18%
  - Largest young producer population percent among all US farms is 14%

*Gray state indicates a state where data is not available

Percent of AI/AN Producers That Worked No Days Off Farm

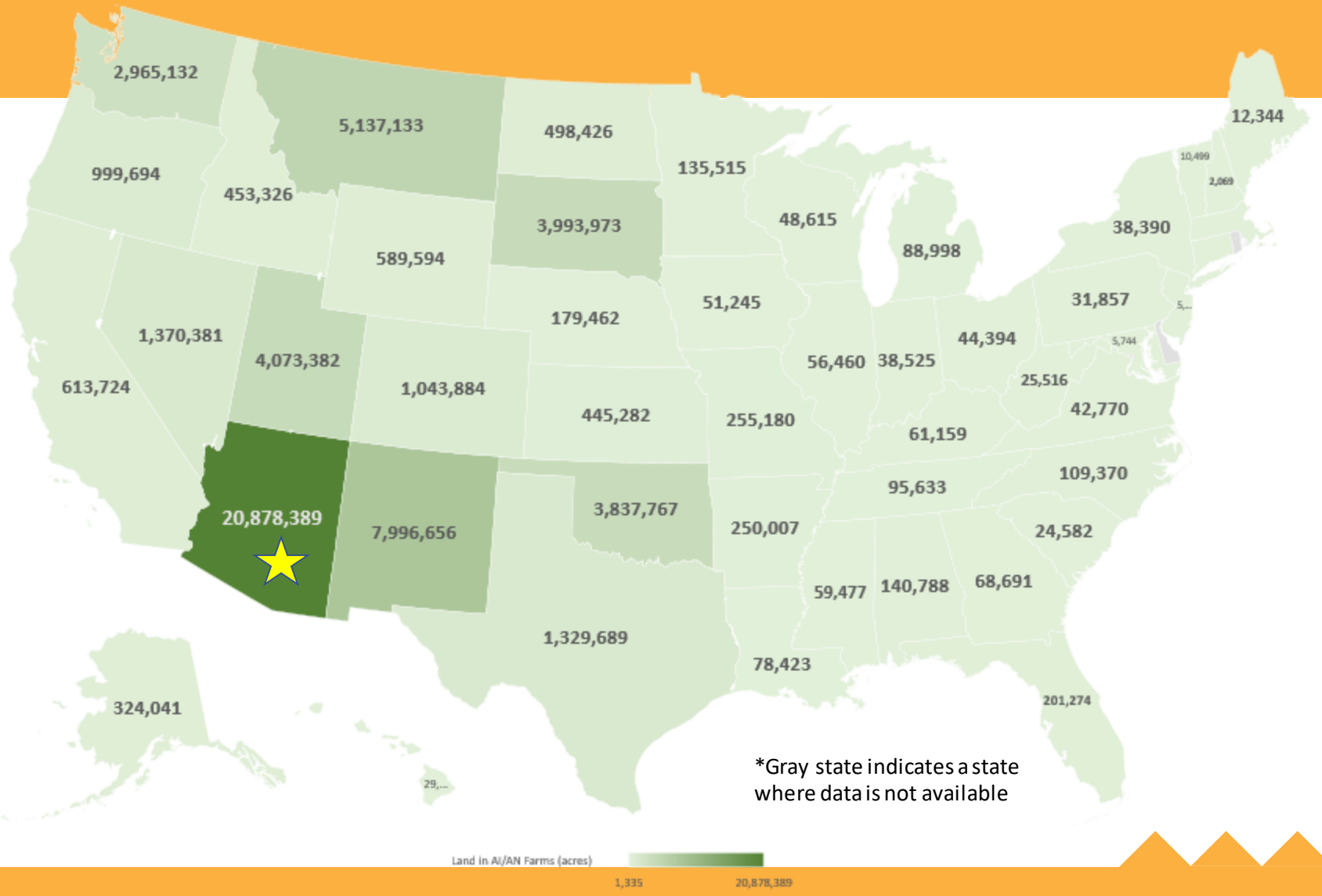


- Top 3 States of Interest
  - Utah*
  - Arizona*
  - New Mexico*

- Lowest States of Interest
  - Oklahoma*
  - Alabama*

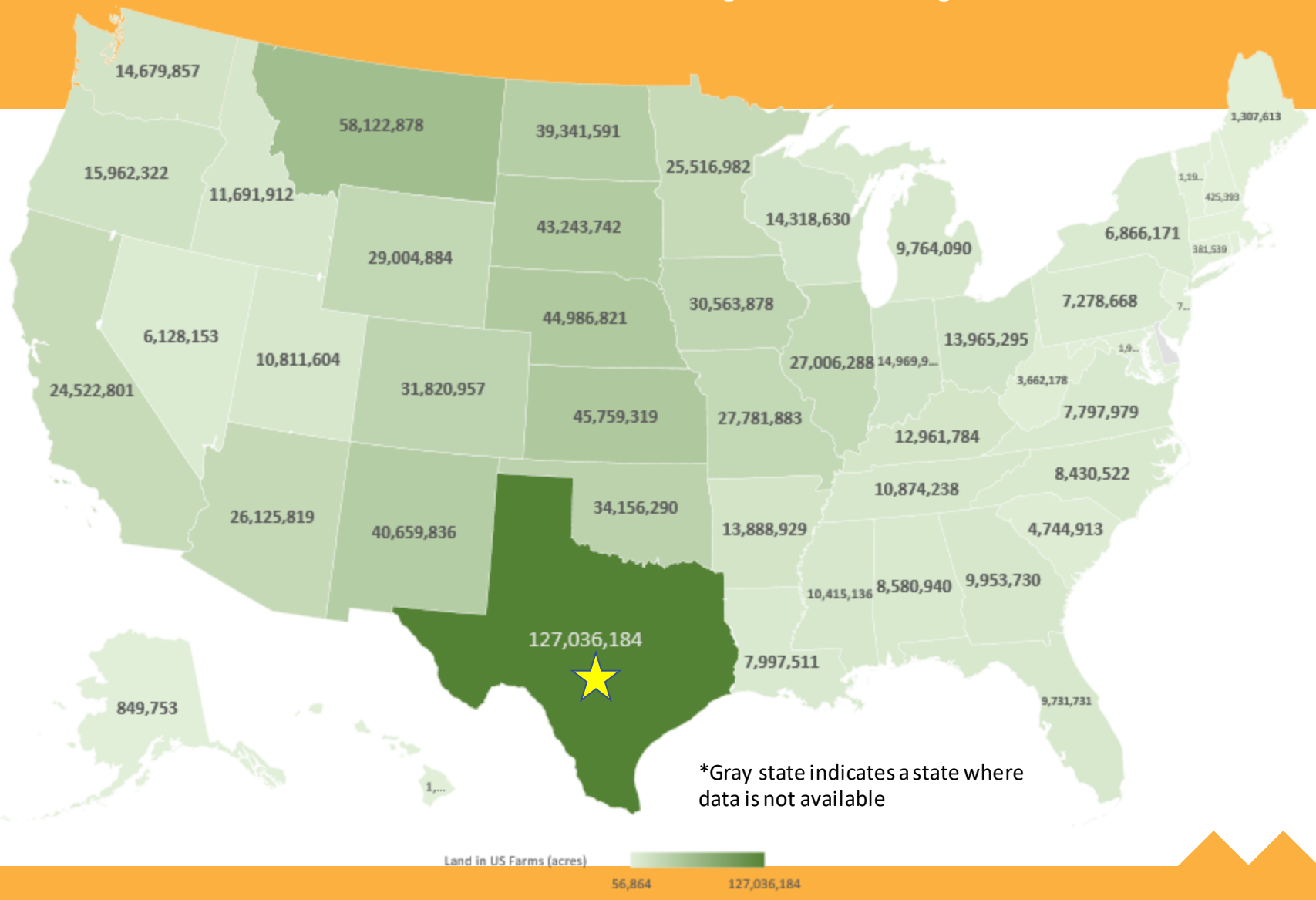
Land in Farms with AI/AN Producers (acres)

- Farmland specific to AI/AN producers is concentrated in 7 states
  - Arizona*
  - New Mexico*
  - Montana*
  - Utah*
  - South Dakota*
  - Oklahoma*
  - Washington*



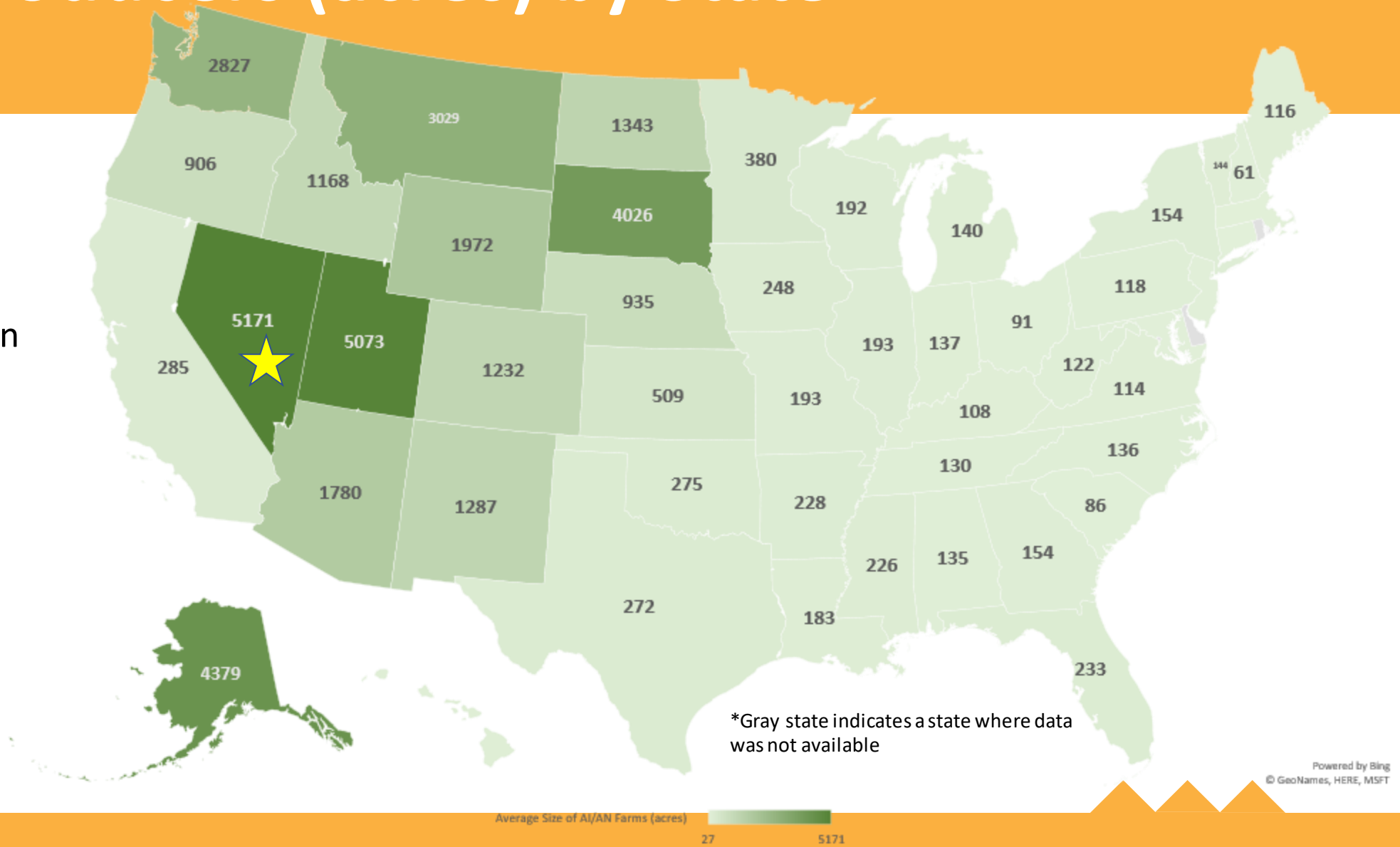
Land in All US Farms (acres)

- Even distribution of land across the US with exception of Texas*



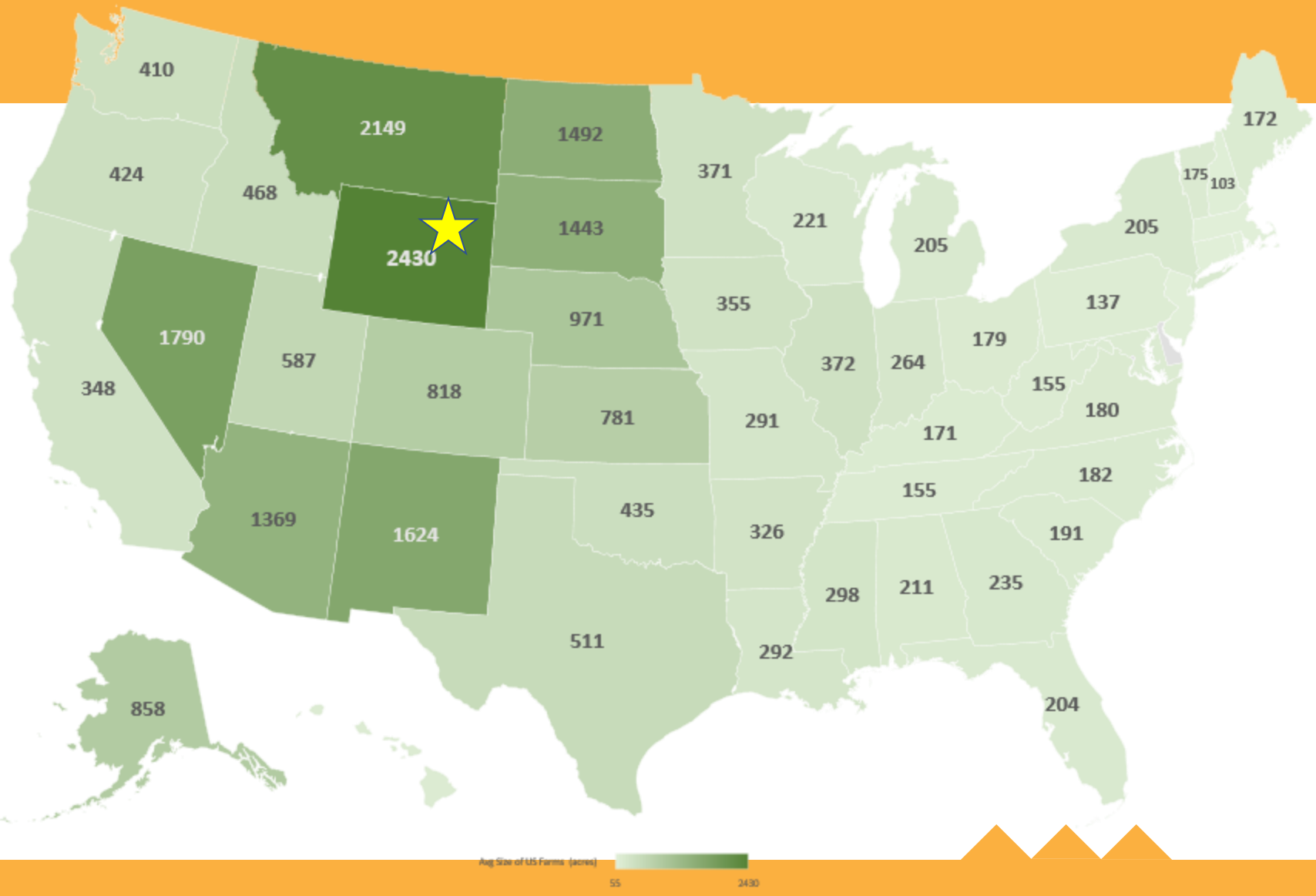
Average Size of Farms with AI/AN Producers (acres) by State

- Largest farms with AI/AN producers are in the western US and Alaska



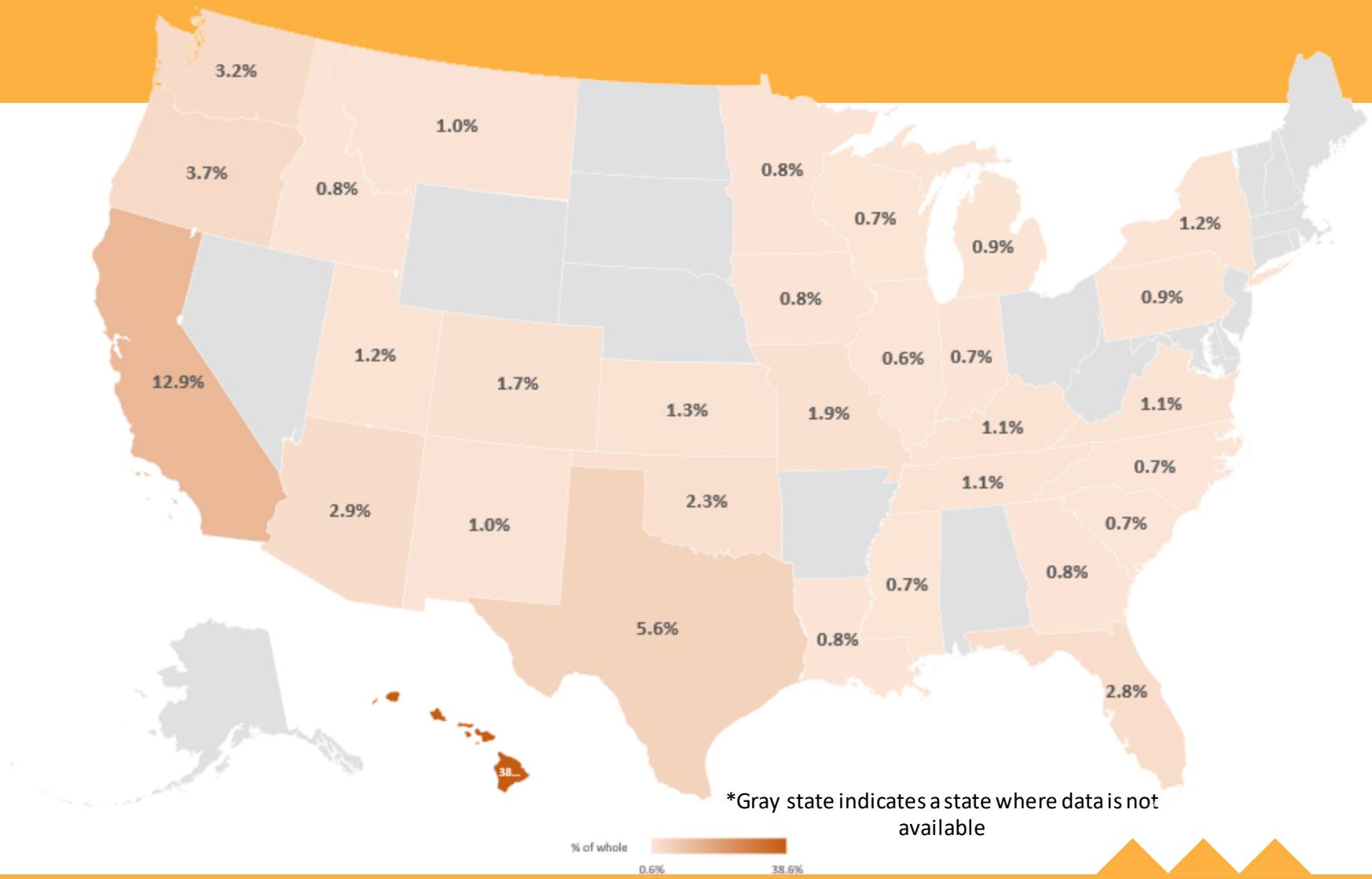
Average Size of All US Farms (Acres) by State

- Largest farms in US is in Wyoming
- Largest farms among AI/AN producers significantly larger than largest US farms
  - State w/ largest average size farms among AI/AN producers has 5,171 acres on average
  - State w/ largest average size farms among all US has 2,430 acres on average



Percent of Native Hawaiian/ Pacific Islander Producers by State

- Largest NH/PI producer population in Hawaii
- Fewest NH/PI producers in Illinois
- NH/PI producer population spread throughout US



*Gray state indicates a state where data is not available


NATIVE AMERICAN
AGRICULTURE FUND

Ag Census 101:
Accessing Ag Data from USDA

Karli's Steps to Utilizing Ag Data

1

Define your study area

2

Identify your study parameters

3

Choose your study timespan

Karli's Steps to Utilizing Ag Data

4

Gather the data

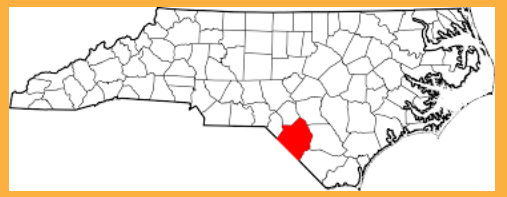
5

Interpret the findings

6

How will you better serve the Native producer above?

1 Robeson County, NC



Home of the Lumbee Tribe of NC

+

Home of the Moore family

2 AI/AN Tobacco Farmers

Parameters of Interest:

- American Indian / Alaska Native producers
- Tobacco industry

I selected these parameters because I'm interested in data related to this specific group.

Left: A picture of tobacco farming in Robeson County, NC reminiscent of the Depression era that hangs over my family's couch at home.

3 Last Ten Years: 2007 - 2017

Factors:

- What do you want to know?
  - I wanted to look at the changes related to the tobacco buyout (2004) ...
- What information is available?
  - ... but I could only find county race and ethnicity data starting in 2007.

4 Decade of Change

	2007	2012	2017	Ten Year Change
Farms	13	8	3	77% decrease
MVPS ($1,000) nominal	2,989	2,591	2,887	
MVPS ($1,000) real	3,534	2,766	2,887	18% decrease
MVPS ($1,000) real per farm	272	346	962	254% increase

MVPS: Market Value of Products Sold | Real prices shown in 2017 currency

5 Story of Consolidation

- Pull in additional information to give context
  - Built the same table for White tobacco farmers in Robeson County

- Talk to experts, do a Google search for articles, think about major market/world events
  - Producers are one of the best resources

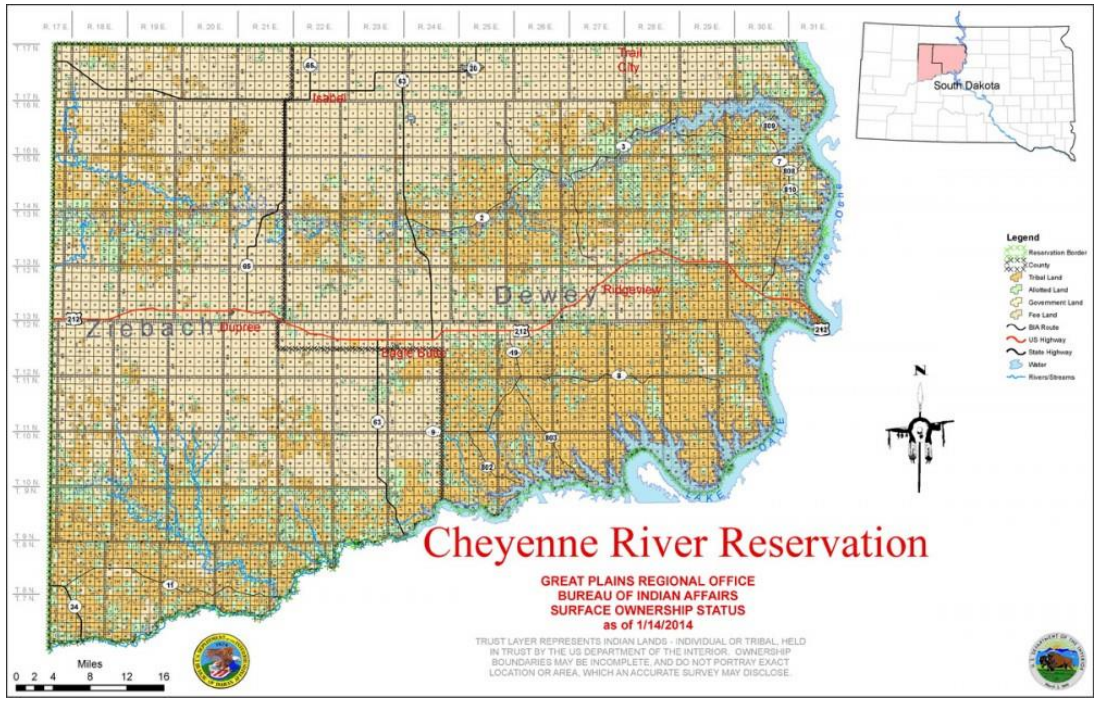
	2007	2012	2017	Ten Year Change
Farms	57	17	14	75% decrease
MVPS ($1,000) nominal	17,382	7,101	8,936	
MVPS ($1,000) real	20,549	7,581	8,936	57% decrease
MVPS ($1,000) real per farm	361	446	638	77% increase

6 Impact to People You Serve

At the end of the day, the biggest part of your data utilization will be **how it impacts your work**.


NATIVE AMERICAN
AGRICULTURE FUND

Case Study: Cheyenne River Indian Reservation, South Dakota



- Headquarters: Eagle Butte, South Dakota
- Reservation size (in acres): 2,730,880
- Estimated population: 12,000

Farms & Acreage 2012-2017

Farms and Land in Farms	Farms operated by AI/AN (2012)	All Farms (2012)	Farms operated by AI/AN (2017)	All Farms (2017)	AI/AN Farm Change (5 years)	All Farm Change (5 years)
Farms (number)	224	470	215	422	-4%	-10%
Land in Farms (acres)	931,870	2,193,055	1,051,480	2,098,142	+13%	-4%
Average size of farm (acres)	4,160	4,666	4,891	4,972	+18%	+7%

- Number of farms with AI/AN producers decreased, but not as much as farms overall
- Acreage under production by AI/AN producers increased even as total acreage decreased
- Average size of farms with AI/AN producers increased more than farm size overall

Share of Ag Production 2012-2017

Farms and Land in Farms	Percent of All Farms operated by AI/AN (2012)	Percent of All Farms operated by AI/AN (2017)	Change in Percent of All Farms operated by AI/AN (5 years)
Farms (number)	48%	51%	+3 percentage points
Land in Farms (acres)	42%	50%	+8 percentage points

- In both number of farms and land in farms, Native producers have increased their share of the total in the last 5 years
  - This increase means that Native producers make up **at least half** of all farms and land in farms on the Cheyenne River Indian Reservation

Tenure Type Definitions

- **Full Owner**: operated only land they owned
- **Part Owner**: operated land they owned and land they rented from others
- **Tenant**: operated only land they rented from others or worked on shares for others.

  Operations are classified as tenant farms when the only land they operate is permit land on the reservations

Farms by Tenure Type 2012-2017

Tenure	Farms Operated by AI/AN (2012)	All Farms (2012)	Farms Operated by AI/AN (2017)	All Farms (2017)	AI/AN Farm Change (5 years)	All Farm Change (5 years)
Full Owners	92	177	64	136	-30%	-23%
Part Owners	90	230	120	242	+33%	+5%
Tenants	42	63	31	44	-26%	-30%

- Number of farms operating only on land they own decreased overall, and more so for AI/AN farms
- Number of farms operating on land both owned and leased increased overall, and more so for AI/AN farms
- There are more mixed ownership AI/AN farms than full or tenant

Share of Farms by Tenure Type 2012-2017

Tenure	Percent of Farms Operated by AI/AN (2012)	Percent of Farms Operated by AI/AN (2017)	Change in Percent of All Farms operated by AI/AN (5 years)
Full Owners	52%	47%	-5 percentage points
Part Owners	39%	50%	+11 percentage points
Tenants	67%	70%	+3 percentage points

- More AI/AN farms are now operating a mix of owned and leased land, up by 11 percentage points in 5 years
- AI/AN farms make up the vast majority of leased only operations

Acres by Tenure Type 2012-2017

Tenure	Acres: Farms operated by AI/AN (2012)	Acres: All Farms (2012)	Acres: Farms Operated by AI/AN (2017)	Acres: All Farms (2017)	AI/AN Farm Change (5 years)	All Farm Change (5 years)
Full Owners	152,600	538,345	297,477	451,311	+95%	-16%
Part Owners	552,750	1,353,080	624,967	1,462,339	+13%	+8%
Tenants	226,520	301,630	129,036	184,492	-43%	-39%

- AI/AN farms operating only on land they own have increased their acreage by 95%
- AI/AN farms with a mix of owned and leased land have increased acreage, too

Share of Acres by Tenure Type 2012-2017

Tenure	Percentage of Acres in Farms operated by AI/AN (2012)	Percentage of Acres in Farms Operated by AI/AN (2017)	Change in Percentage of Acres in Farms Operated by AI/AN (5 years)
Full Owners	28%	66%	+38 percentage points
Part Owners	41%	43%	+2 percentage points
Tenants	75%	70%	-5 percentage points

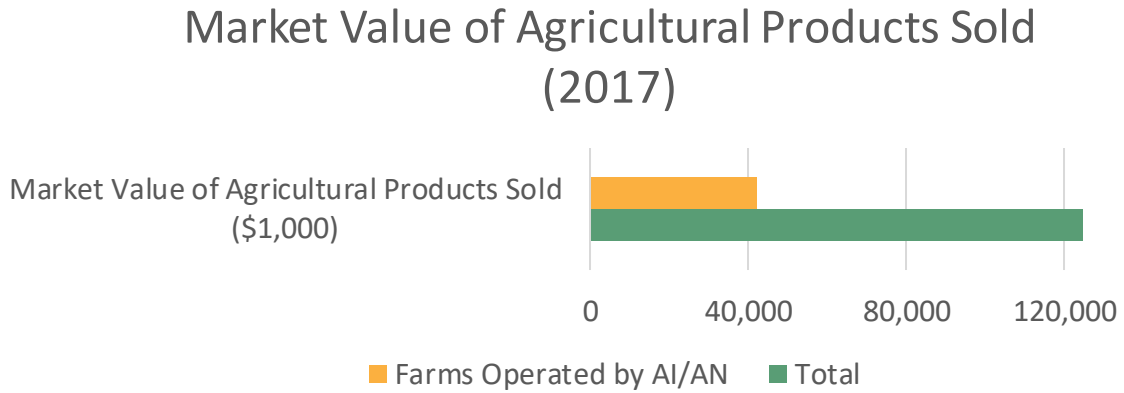
- AI/AN producers have a significant share of the tenant land, even though that share when down in the last 5 years
- AI/AN producers have greatly increased their share of the overall on owned land operation

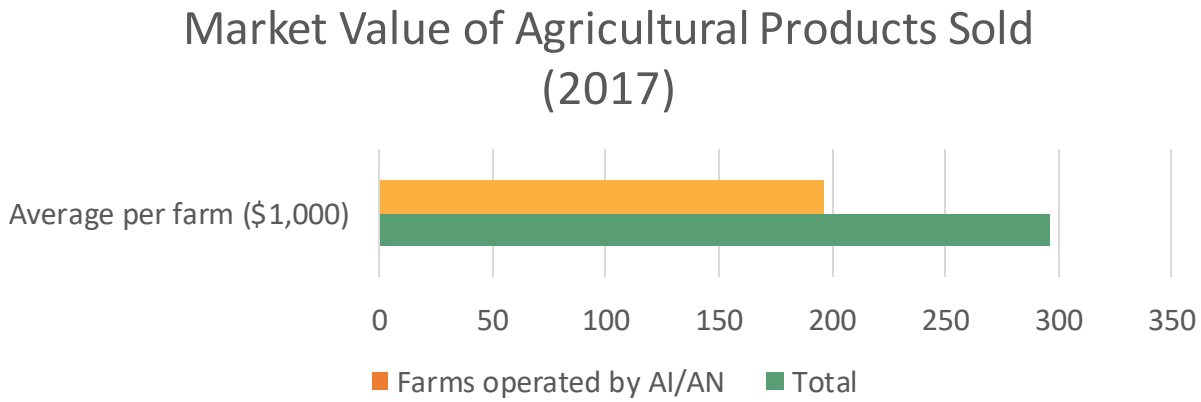
Market Value of Agricultural Products Sold 2012-2017

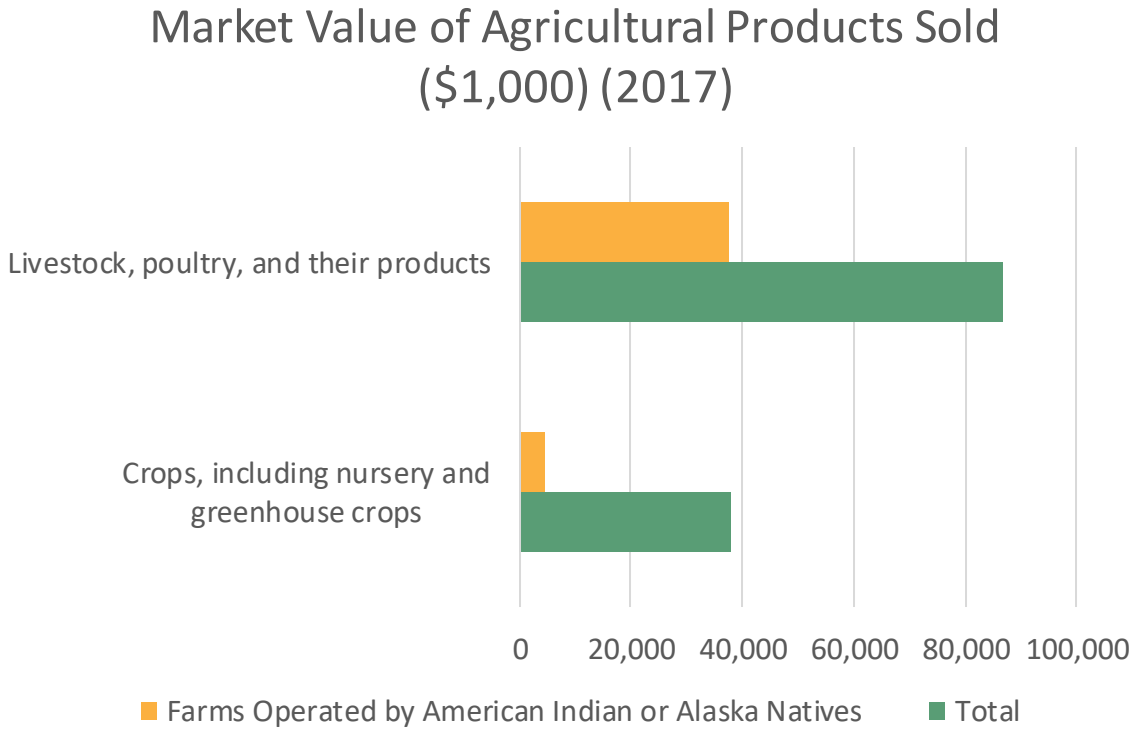
Market Value of Products Sold	Farms operated by AI/AN (2012)	Total (2012)	Farms operated by AI/AN (2017)	Total (2017)	AI/AN Farm Change (5 years)	All Farm Change (5 years)
MVPS ($1,000)	32,277	138,148	42,196	124,704	+31%	-10%
Average per farm ($1,000)	144	294	196	296	+36%	+1%
Crops, nursery & greenhouse ($1,000)	4,201	63,004	4,499	38,042	+7%	-40%
Livestock, poultry, and their products ($1,000)	28,076	75,144	37,697	86,662	+34%	+15%

- MVPS for AI/AN farms increased while MVPS for all farms decreased
- A greater share of the total MVPS is now claimed by AI/AN farms
  - 2012 – 23%
  - 2017 – 34%

Market Value of Agricultural Products Sold 2012-2017







Select Characteristics 2012-2017

Characteristics	Farms operated by AI/AN (2012)	All Farms (2012)	Farms operated by AI/AN (2017)	All Farms (2017)	AI/AN Farm Change (5 years)	All Farm Change (5 years)
Producers/Operators	298	759	284	732	-5%	-4%
Male Producers/Operators	194	511	192	485	-1%	-5%
Female Producers/Operators	104	248	92	247	-12%	--
Average Age	51	51	53.3	54.1	+5%	+6%

- Number of Producers/Operators has decreased in both AI/AN operated farms and total farms on the Cheyenne River Reservation
- The average age also increased for both AI/AN Producers/Operators, as well as overall.

New Categories from 2017

Category	Farms Operated by AI/AN	Total	Percent of AI/AN Farms
Young Producers	32	76	42%
Military Service (served)	22	55	40%

- Young Producers are important to highlight because with the average age of farmers going up, it is good to see that there are those stepping up to fill their shoes
- AI/AN serve in the armed forces at a higher rate than any other race, so it is important to acknowledge as well that half of the veteran farmers on Cheyenne River are also AI/AN