



Finance and Credit Issues for Agriculture and the Food System: Update 2010

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Summary: Key Changes

November 2008 - Today



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- Short-term liquidity
- Financial market volatility
- Unemployment
- Deleveraging
- Public debt: level, duration, yield curve
- Federal and state budgets
- Corporate and farm profitability
- Securitization markets
- Bank failures & stress on FDIC
- Agricultural financial stress: dairy, protein and ethanol markets

Financial Health of the Consumer



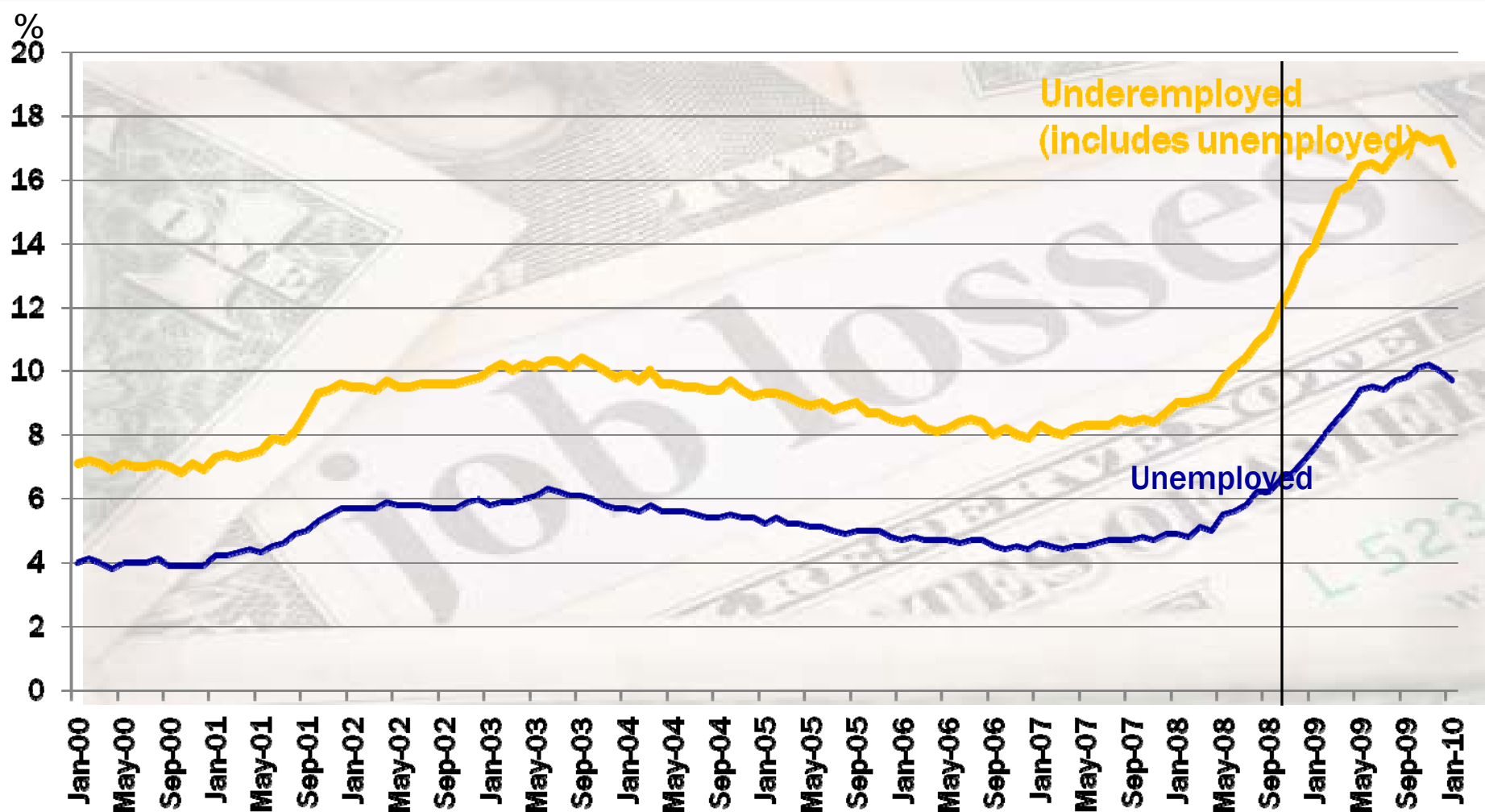
- **Income declines**
 - 15 million unemployed + 11.5 underemployed
 - Average work week 33.3 hours
 - Median unemployment 19.9 weeks (up 100% Nov 2008)
- **Wealth declines**
 - \$3.6 trillion off home price peak
 - \$8.3 trillion off financial asset peak values
- **23% home mortgages with negative equity**
- **9.24% mortgages past due (up 44%)**



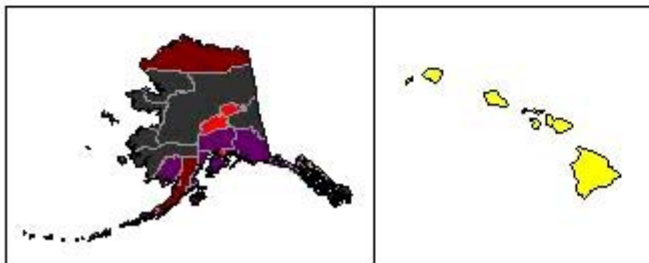
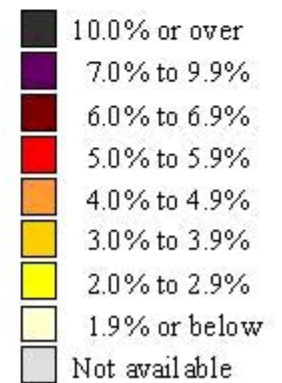
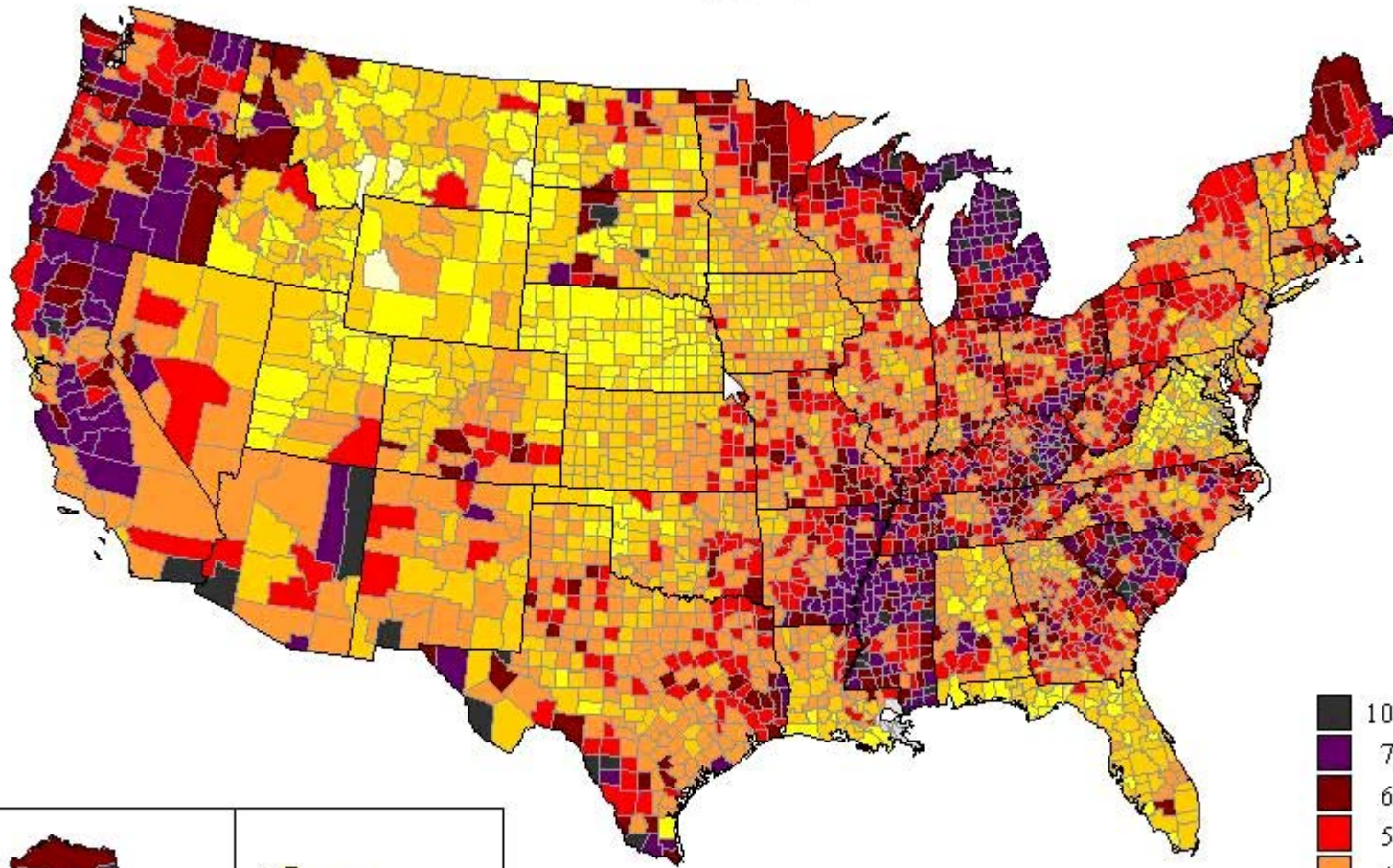
Labor Market



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Unemployment Rates by County February 2007 4.6%

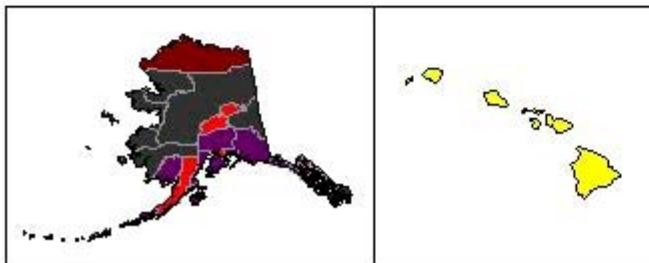
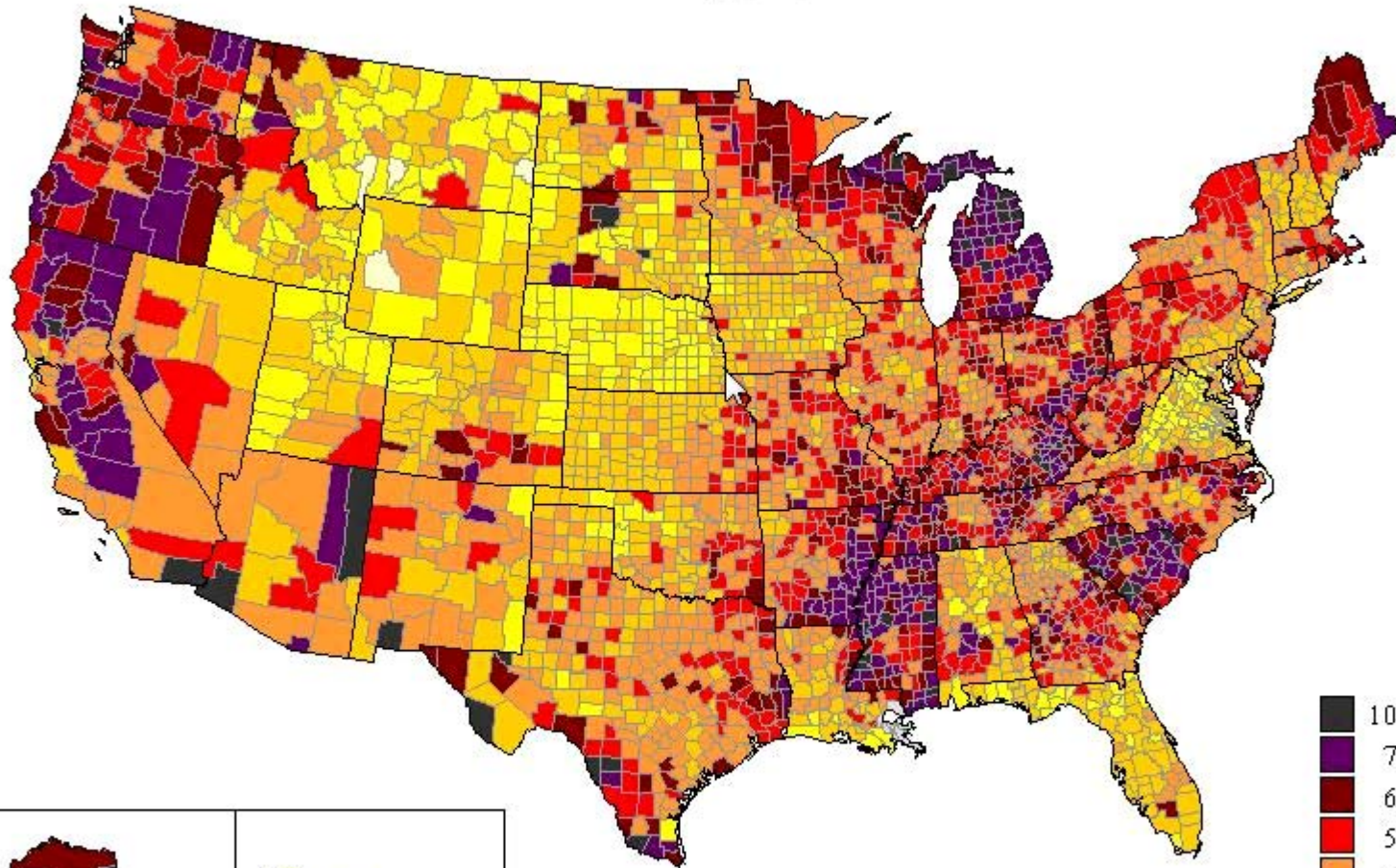


Source: BLS and Latoya Egwuekwe

Unemployment Rates by County

March 2007

4.6%



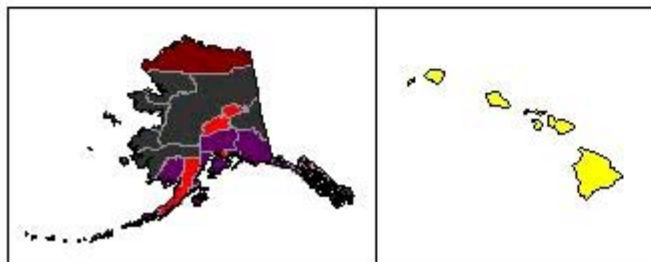
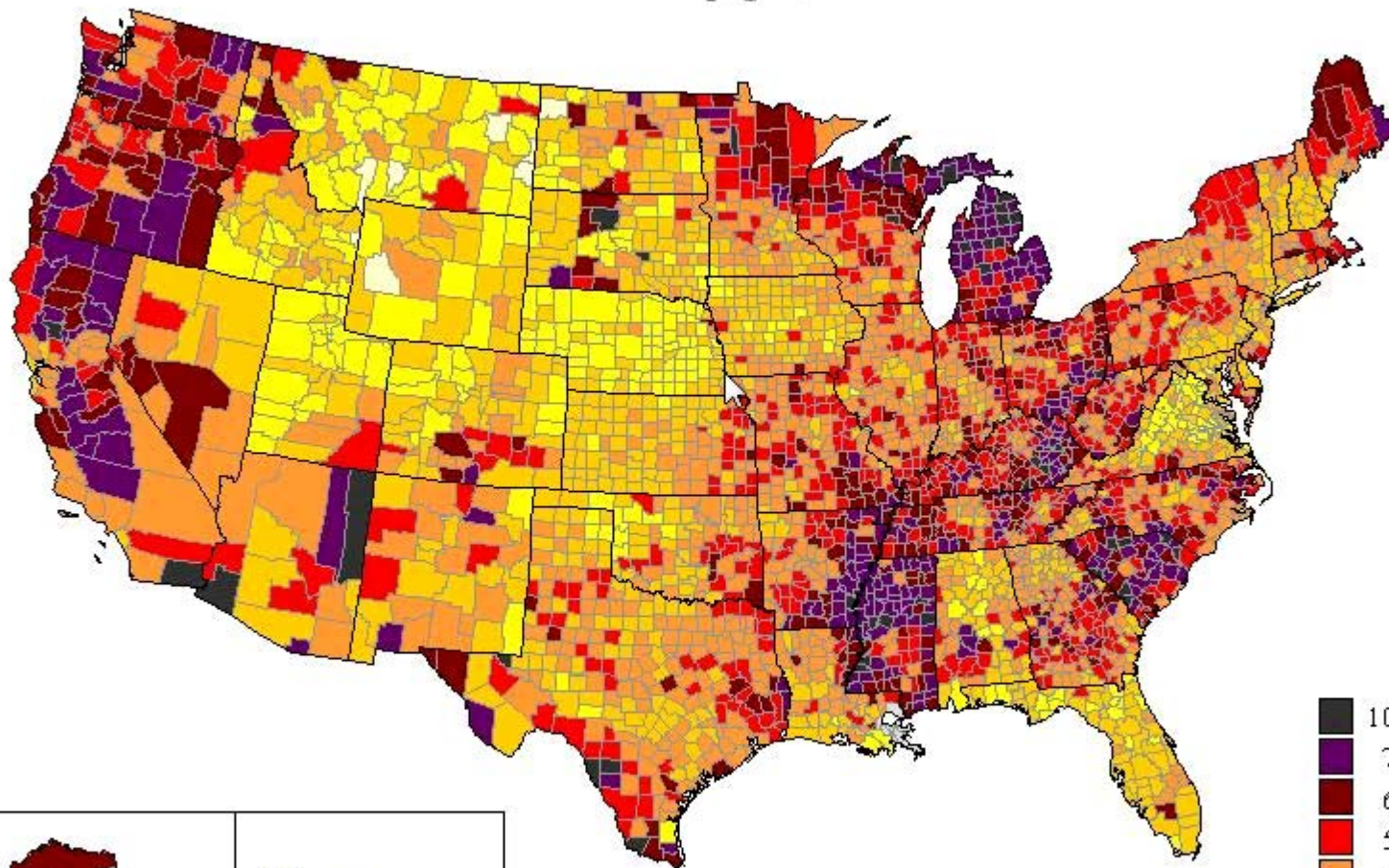
Source: BLS and Latoya Egwuekwe

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Unemployment Rates by County

May 2007

4.5%

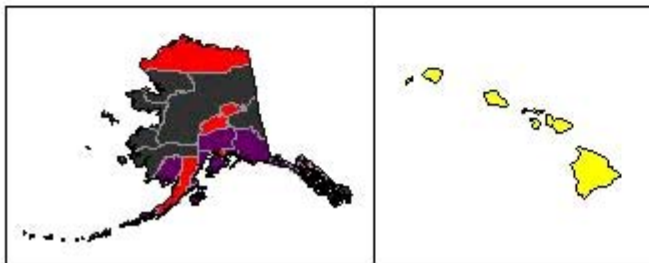
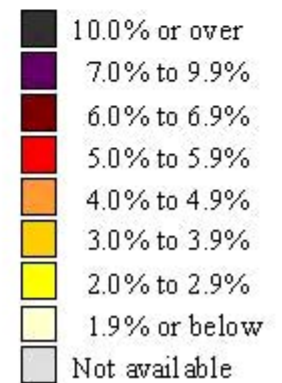
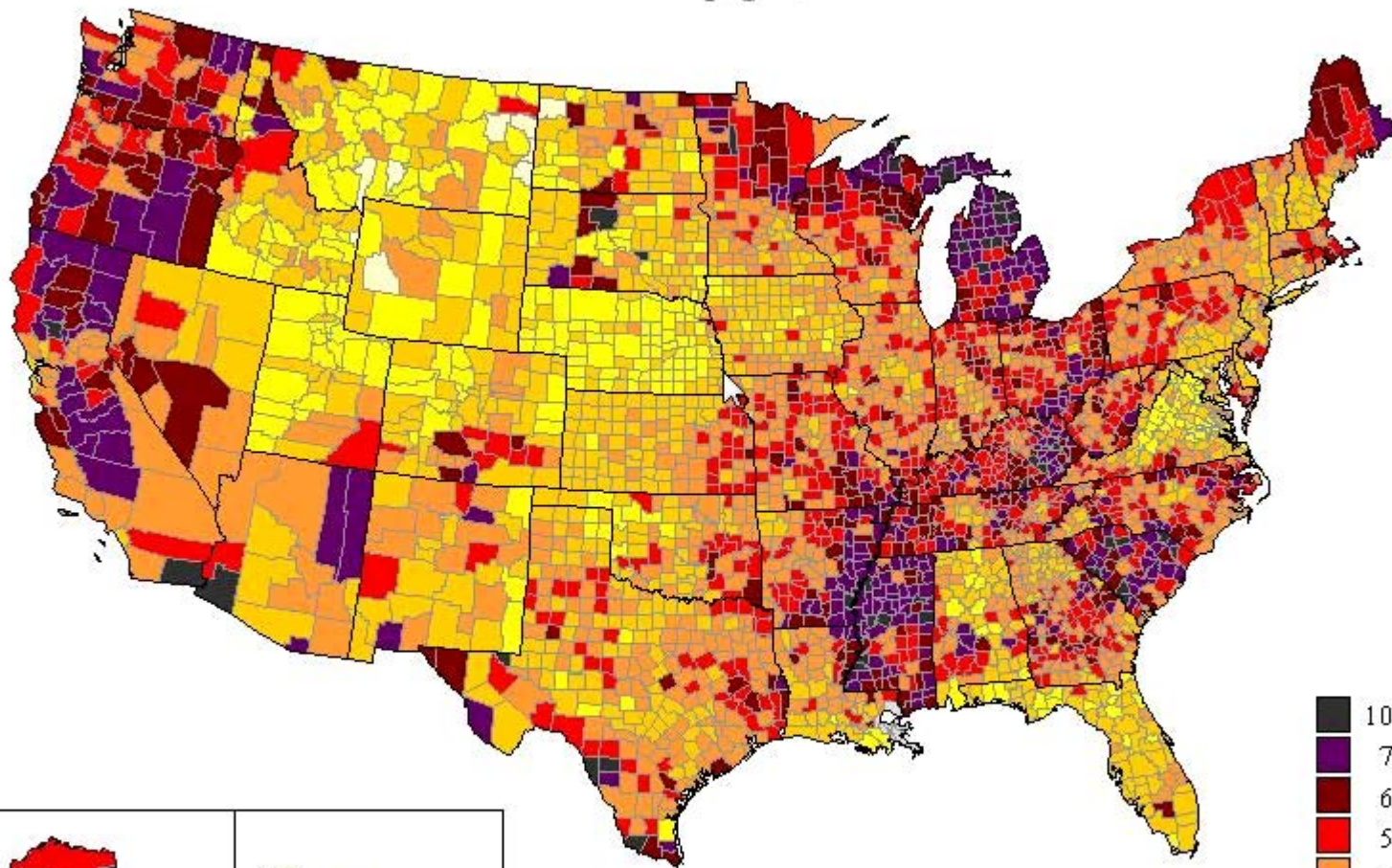


Source: BLS and Latoya Egwuekwe

Unemployment Rates by County

June 2007

4.5%

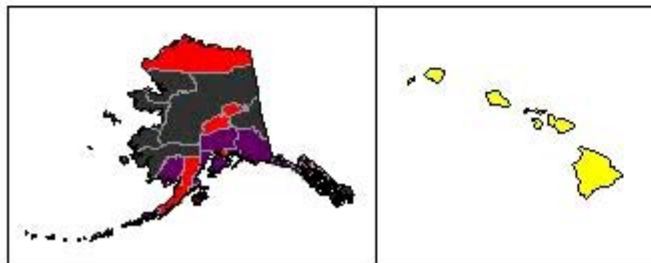
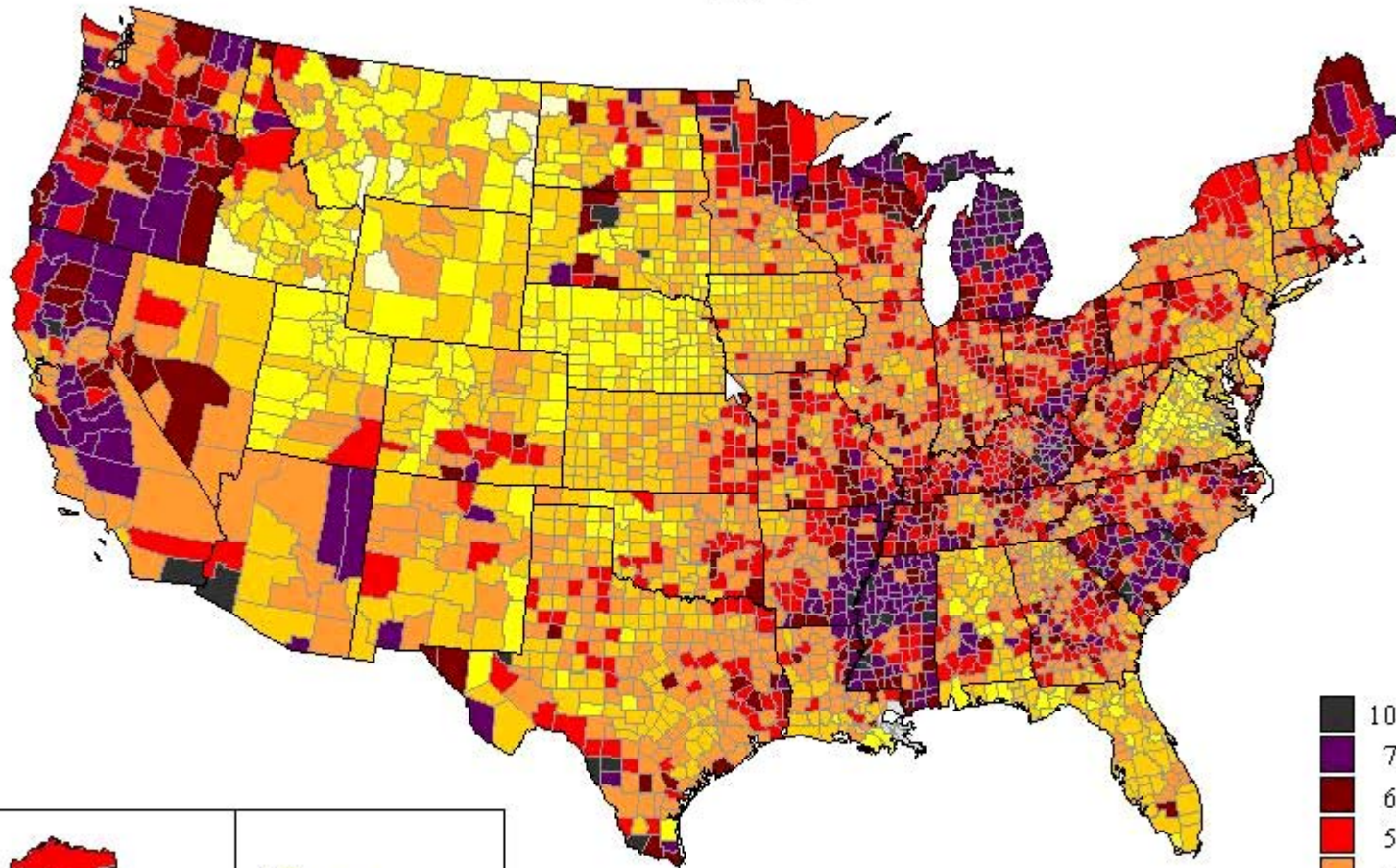


Source: BLS and Latoya Egwuekwe

Unemployment Rates by County

July 2007

4.5%

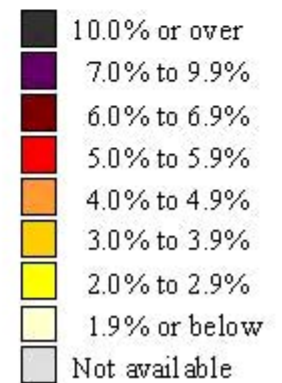
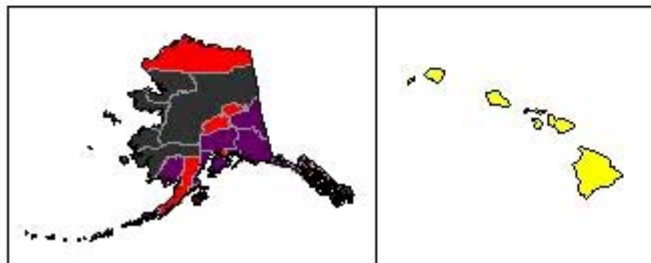
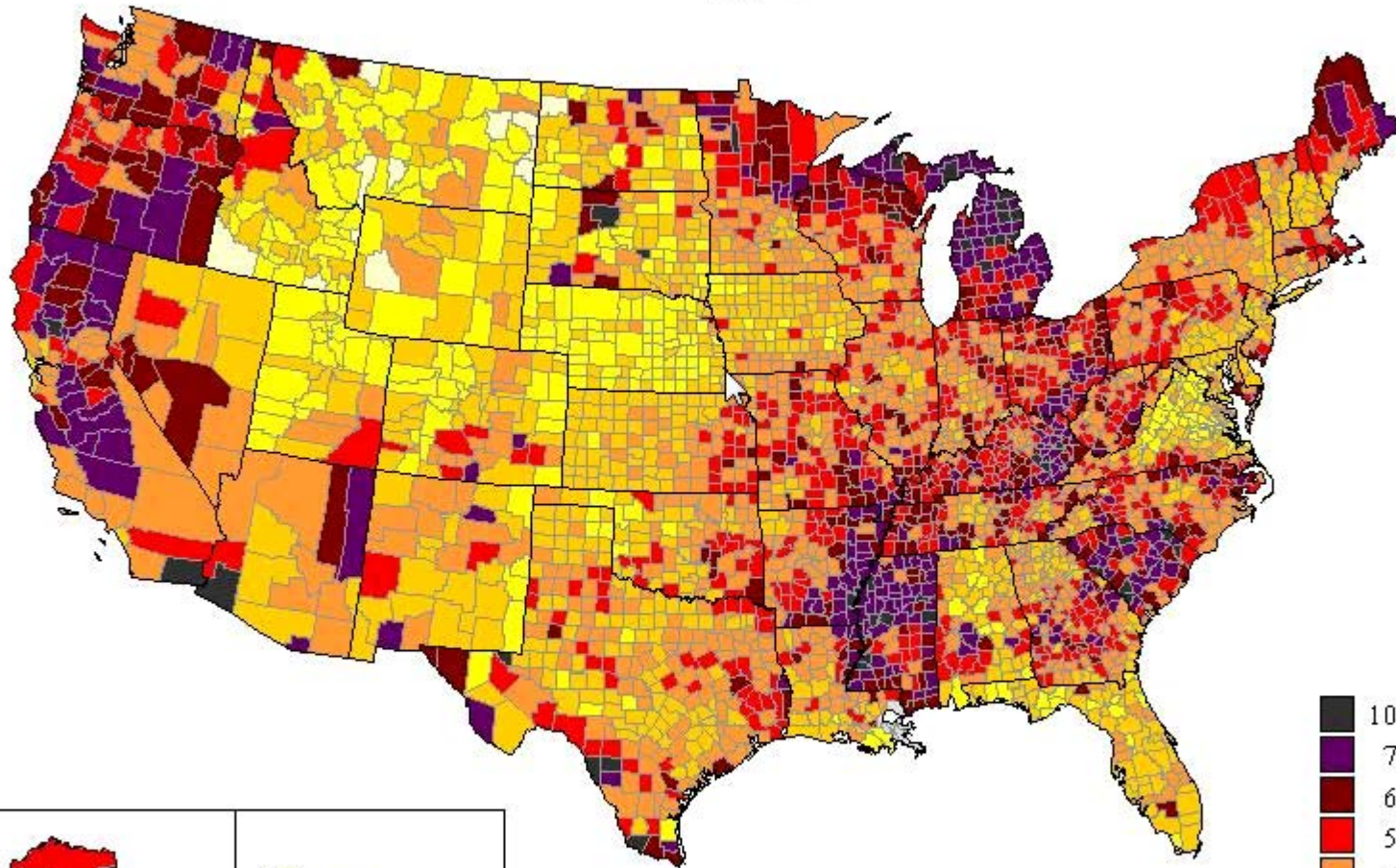


Source: BLS and Latoya Egwuekwe

Unemployment Rates by County

August 2007

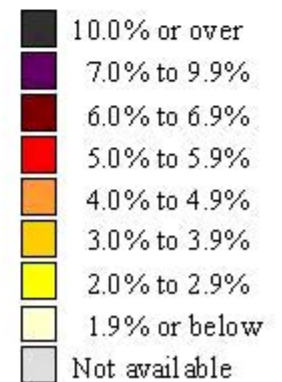
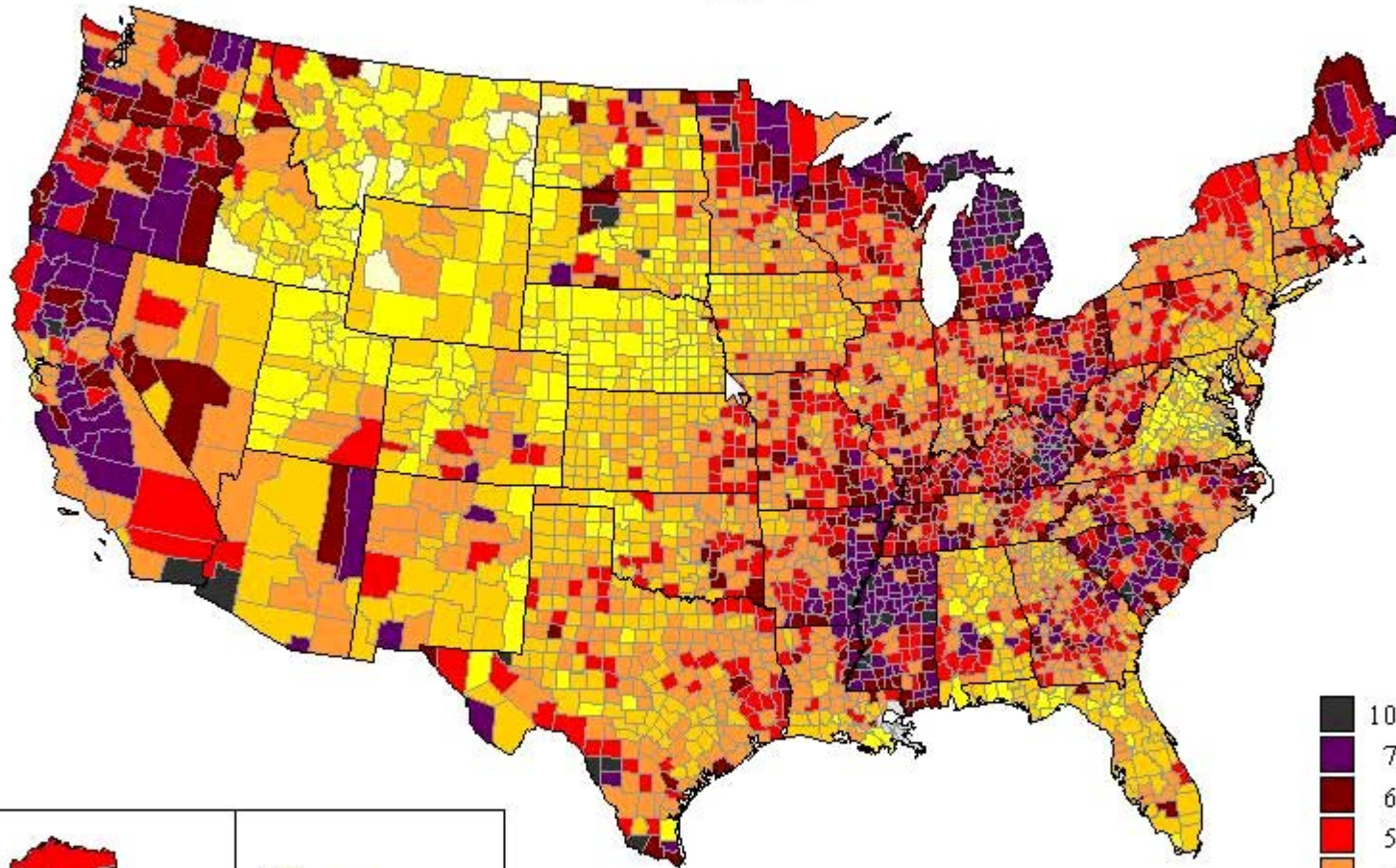
4.5%



Source: BLS and Latoya Egwuekwe

Unemployment Rates by County September 2007

4.5%

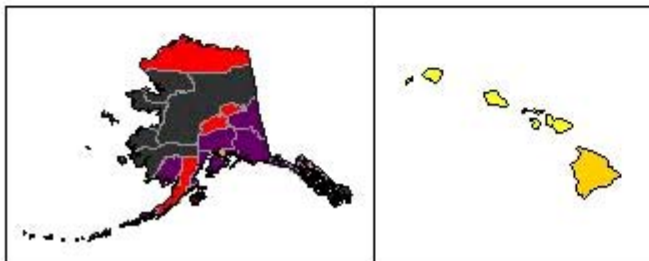
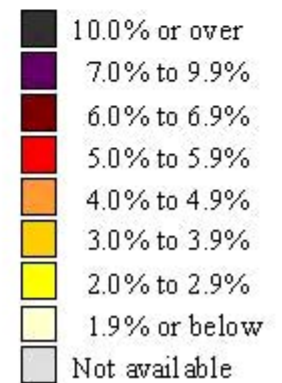
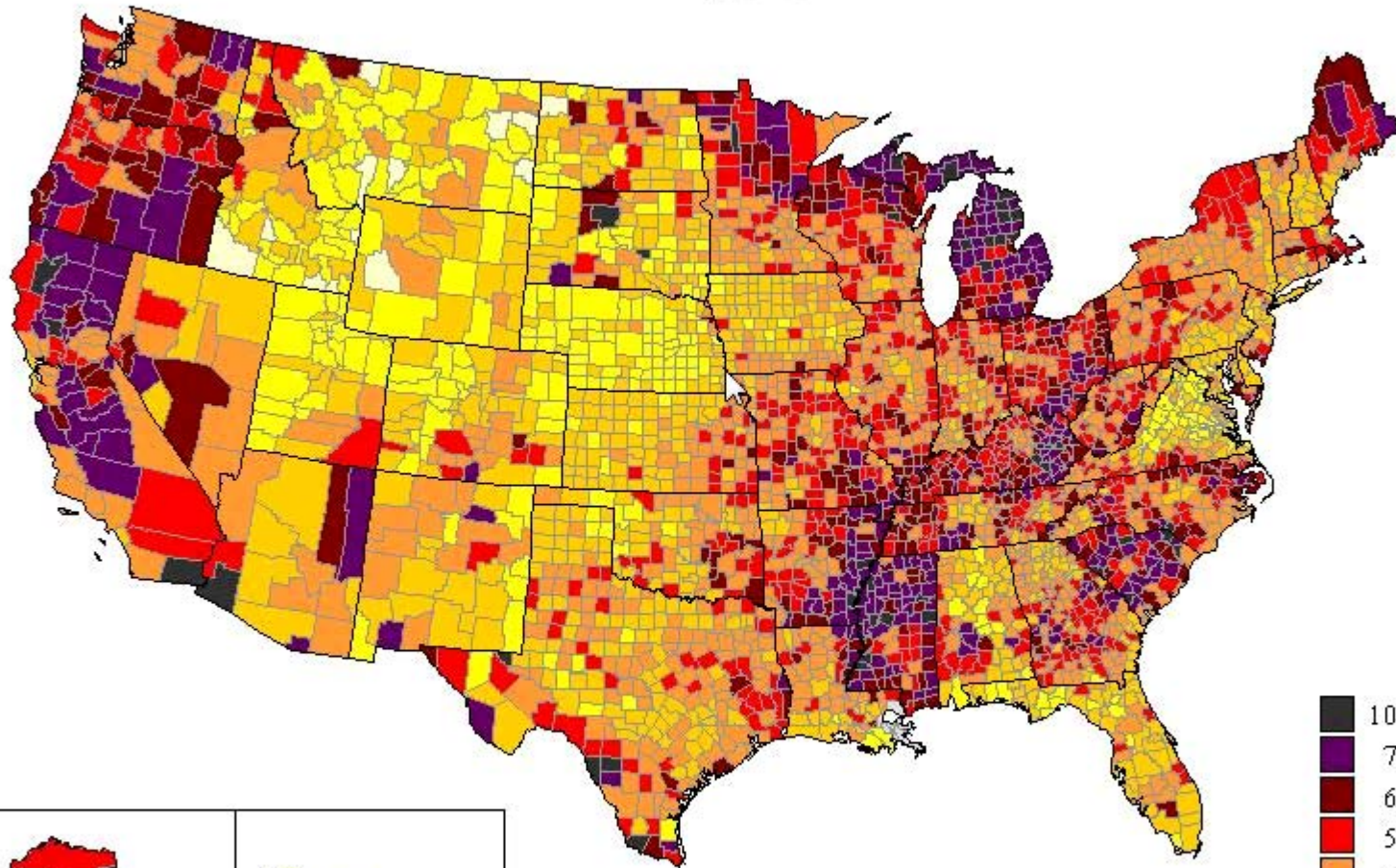


Source: BLS and Latoya Egwuekwe

Unemployment Rates by County

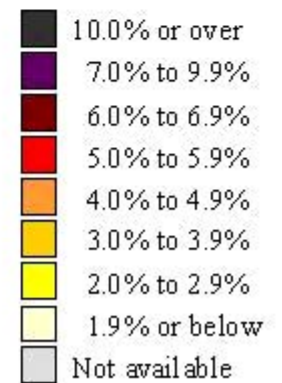
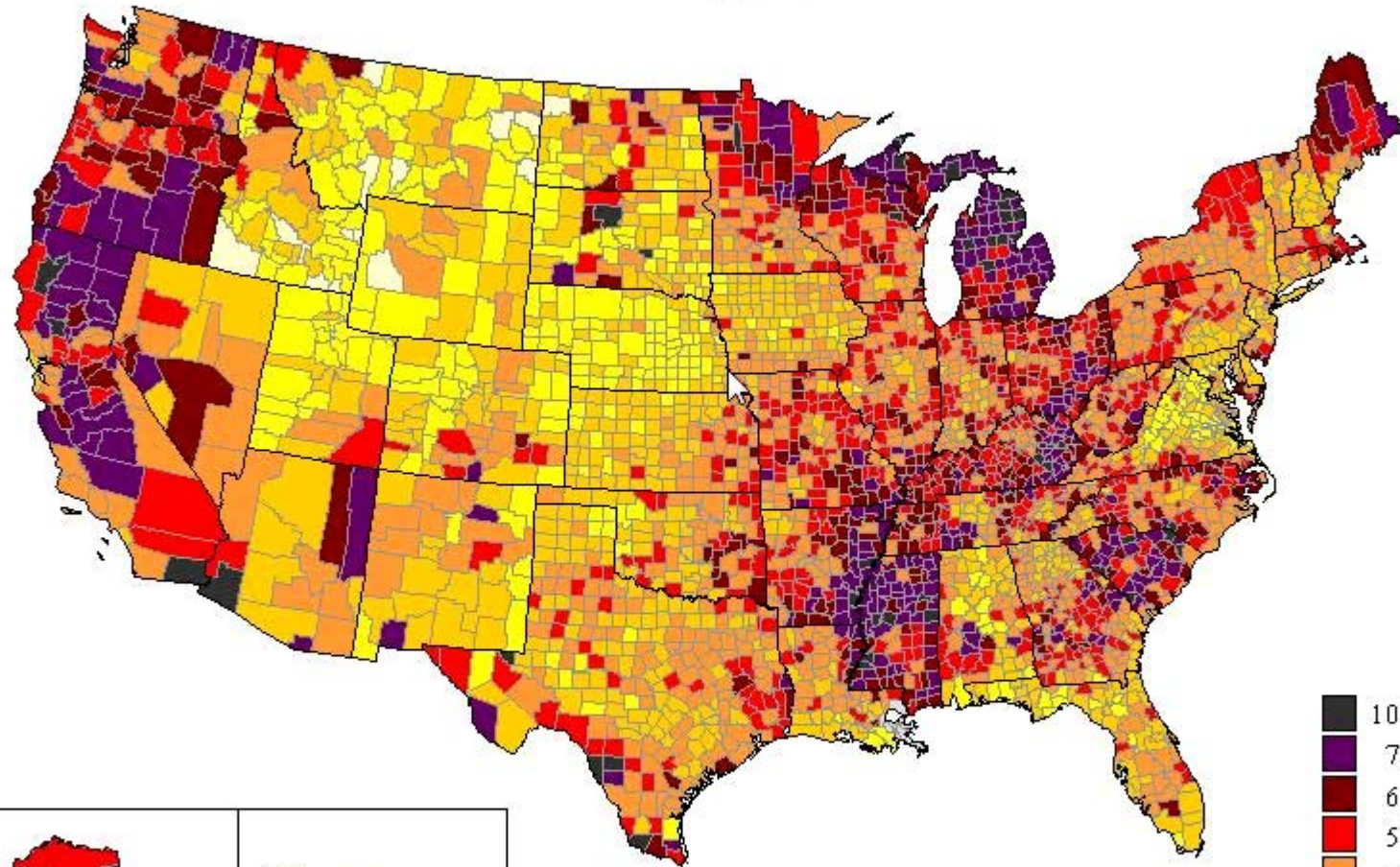
October 2007

4.6%



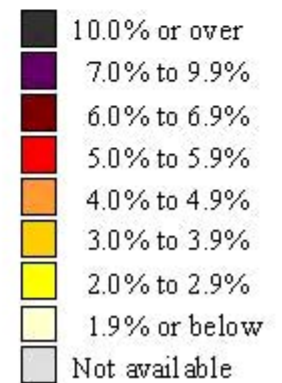
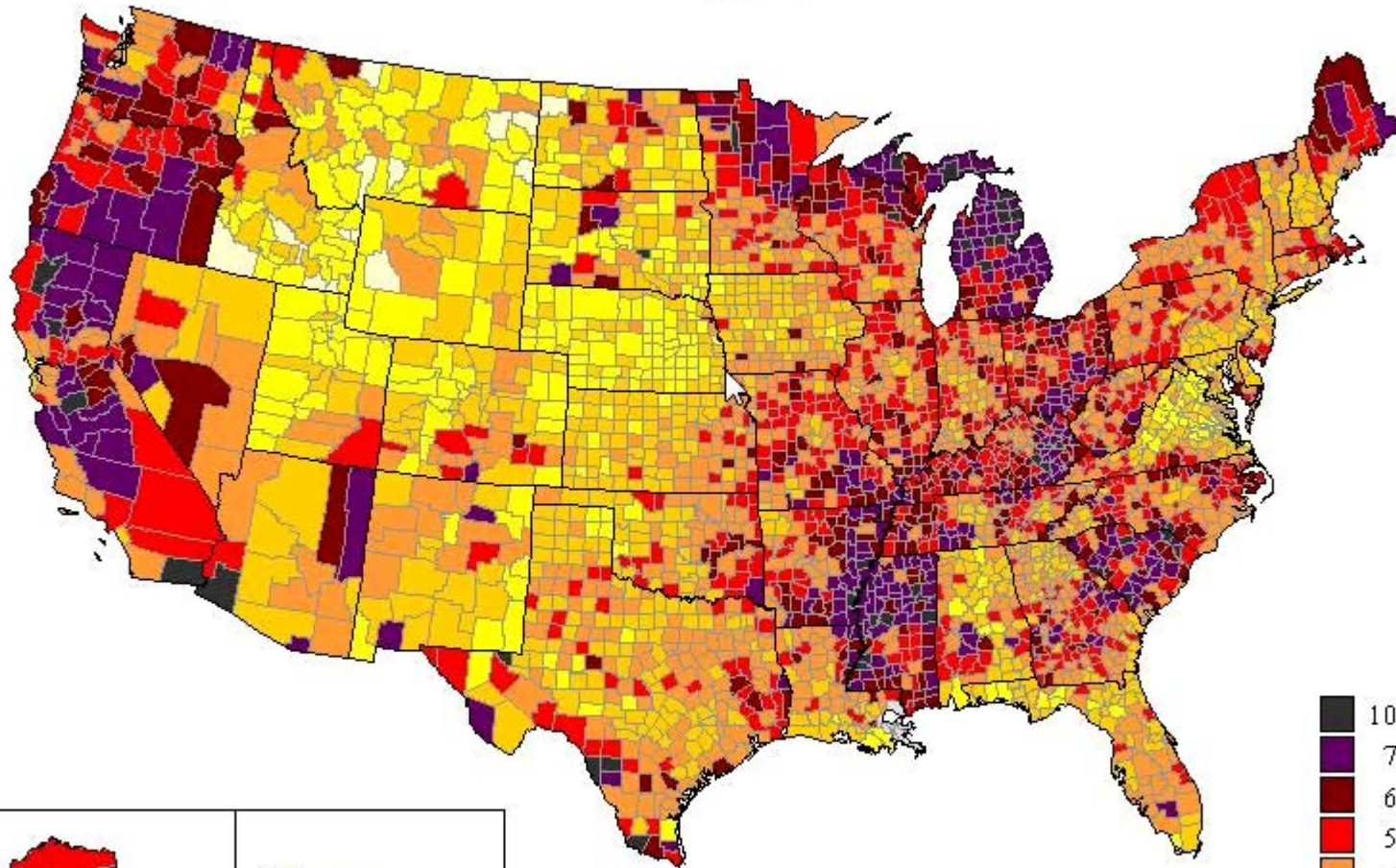
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County November 2007 4.6%



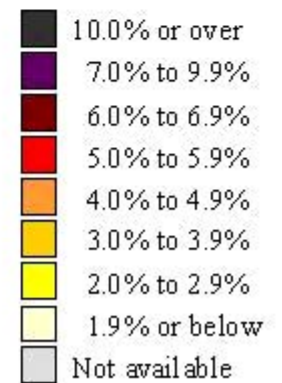
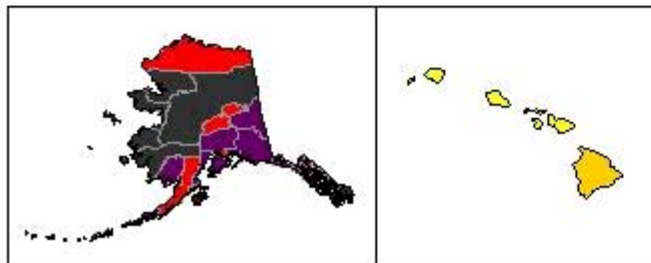
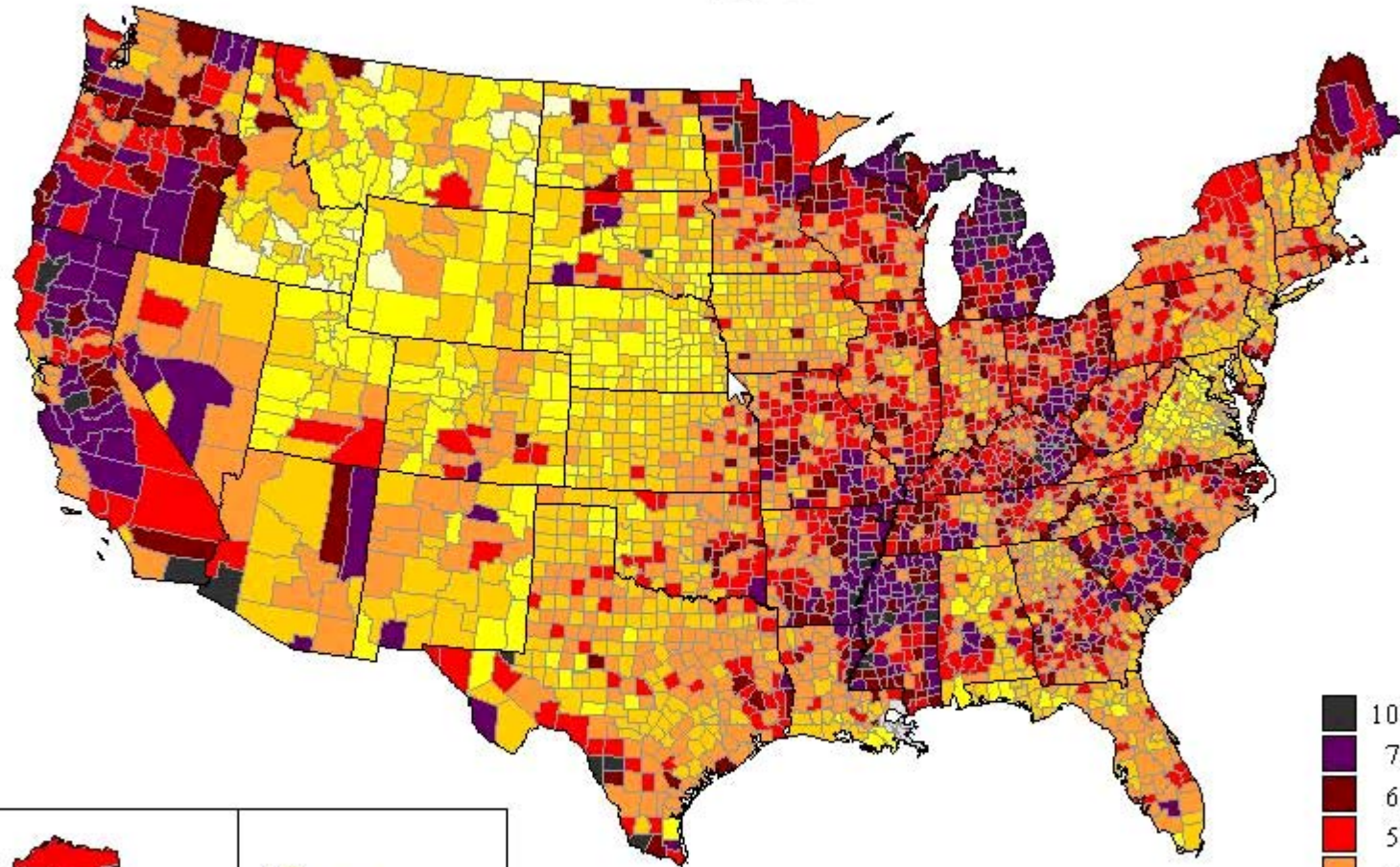
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County December 2007 4.6%



Source: BLS and Latoya Egwuekwe

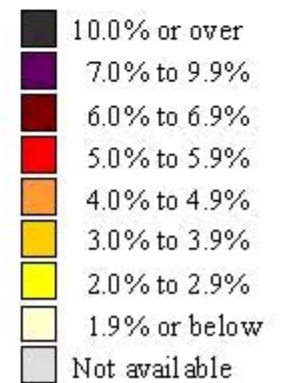
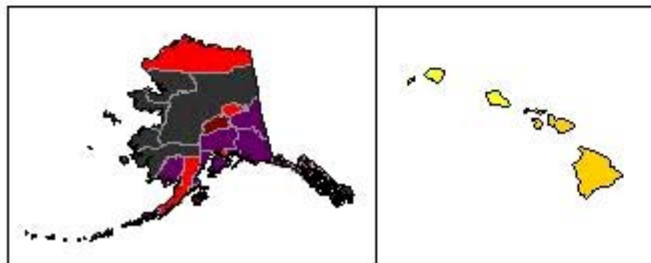
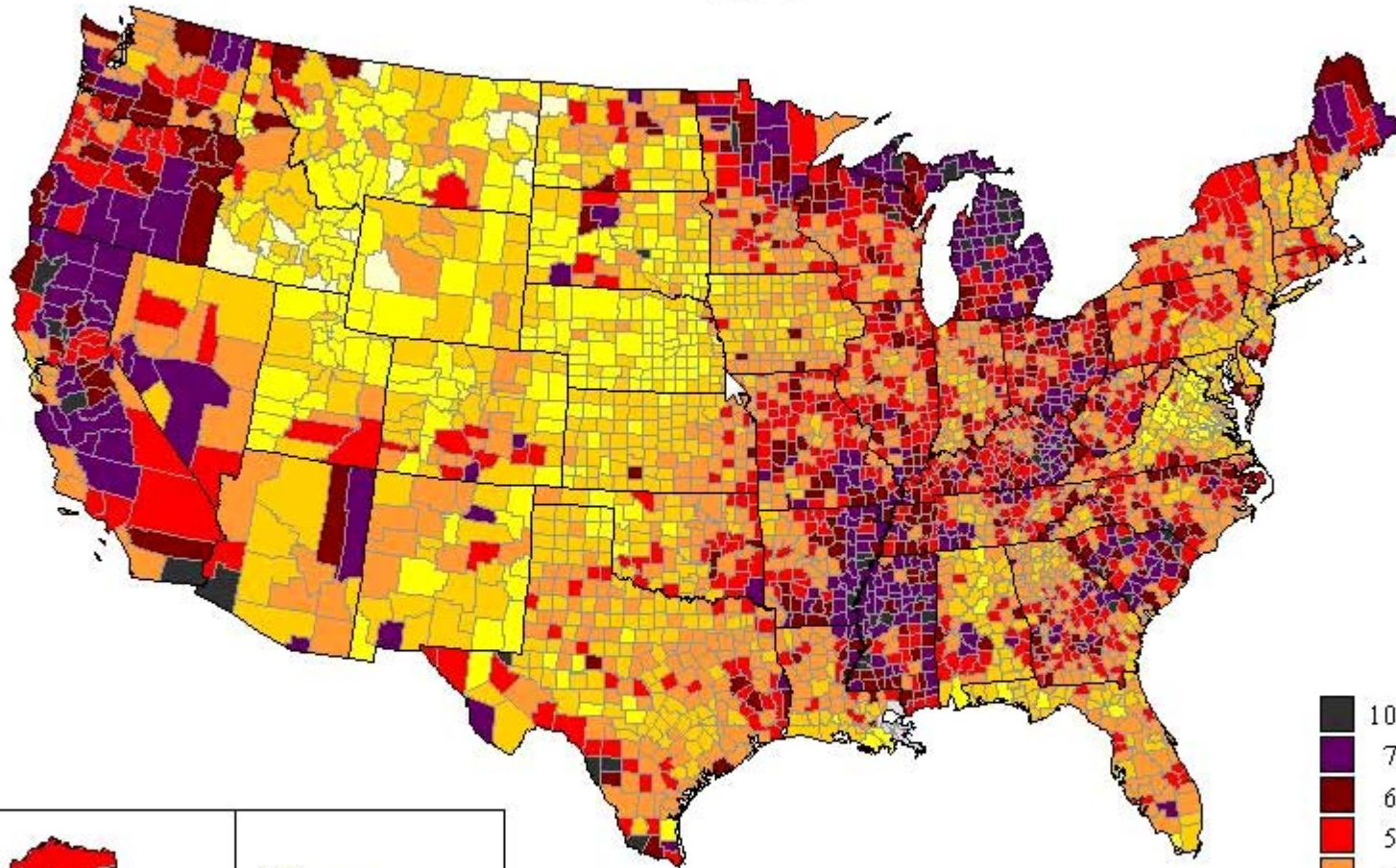
Unemployment Rates by County January 2008 4.7%



Source: BLS and Latoya Egwuekwe

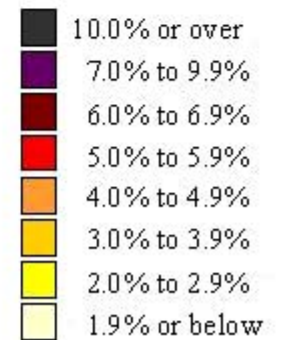
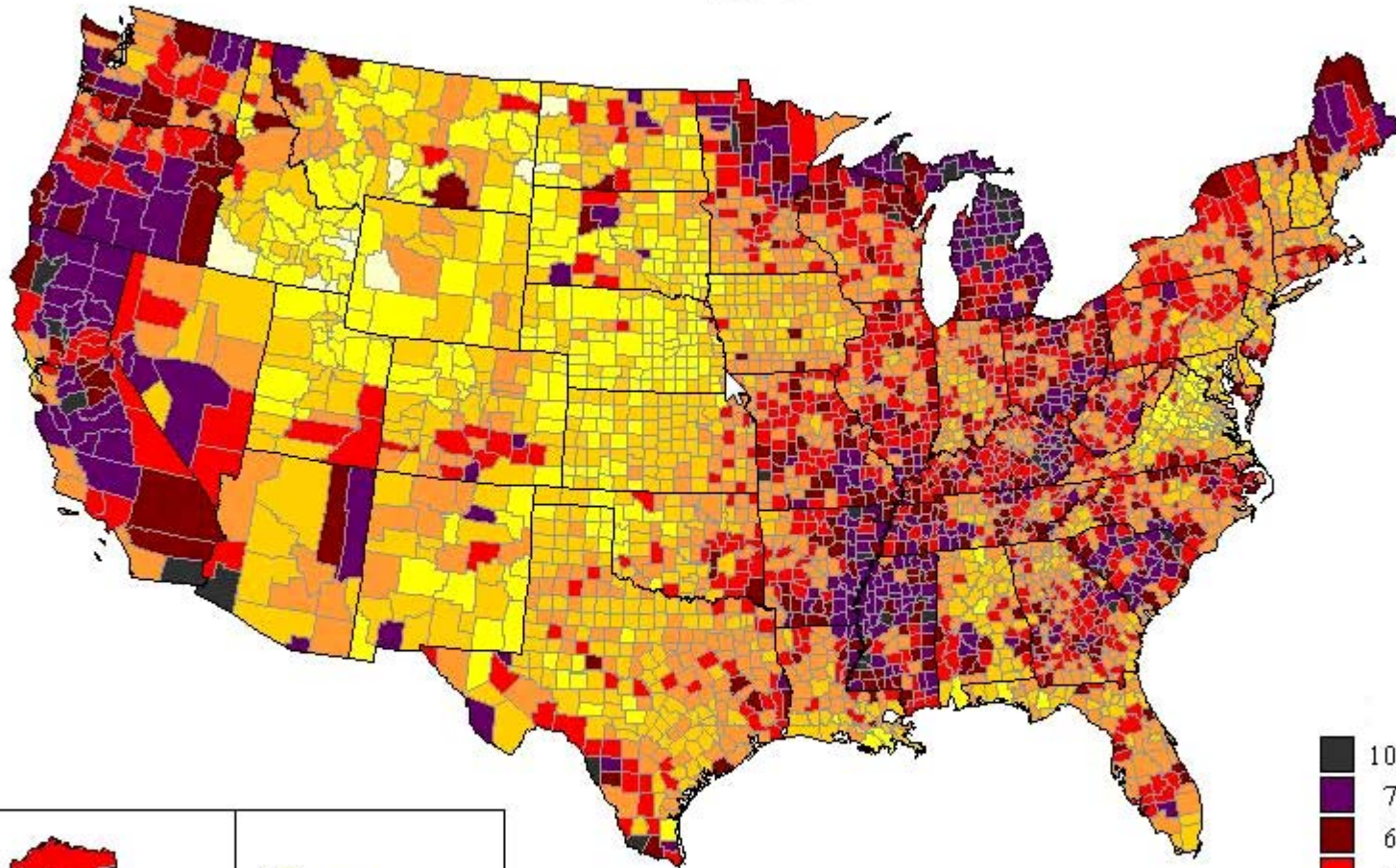
Unemployment Rates by County February 2008

4.7%



Source: BLS and Latoya Egwuekwe

Unemployment Rates by County March 2008 4.7%

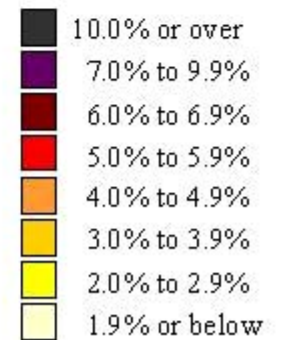
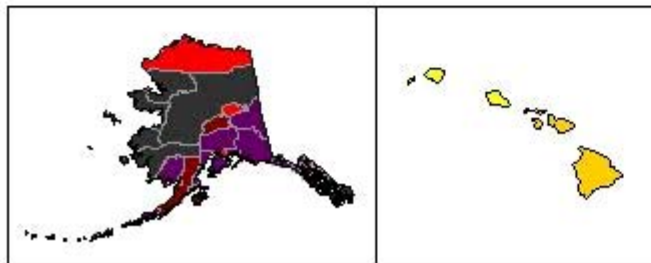
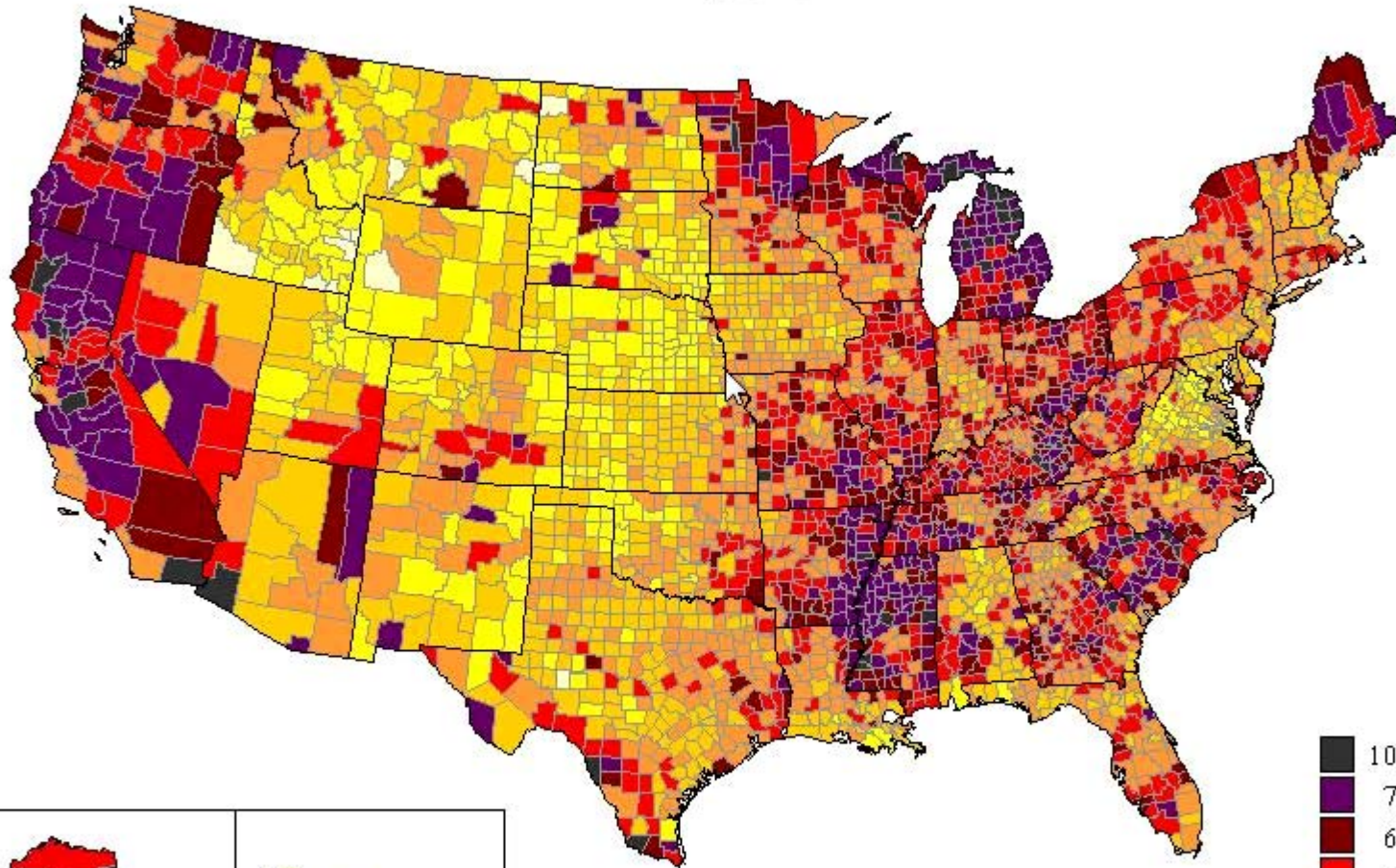


Source: BLS and Latoya Egwuekwe

Unemployment Rates by County

April 2008

4.8%

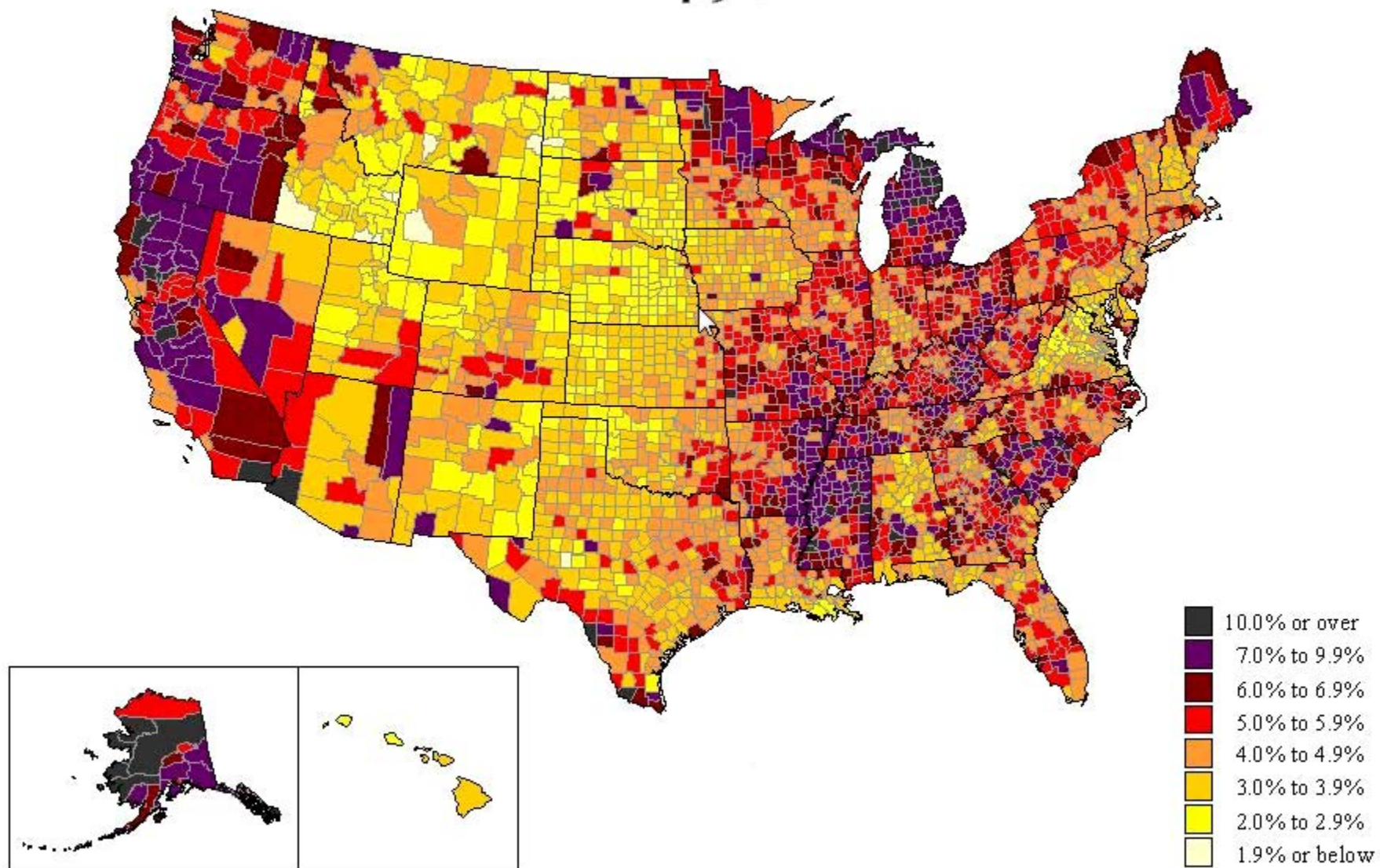


Source: BLS and Latoya Egwuekwe

Unemployment Rates by County

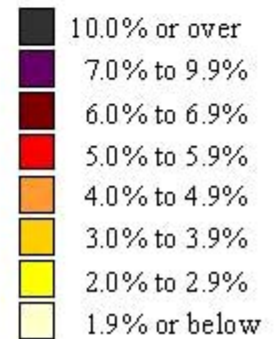
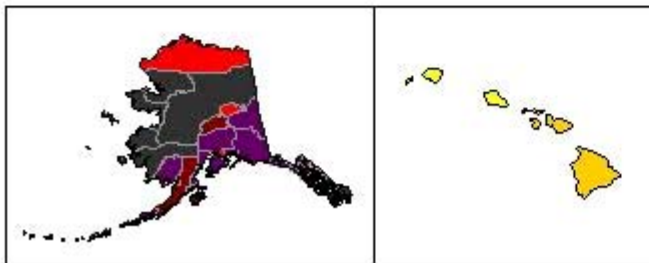
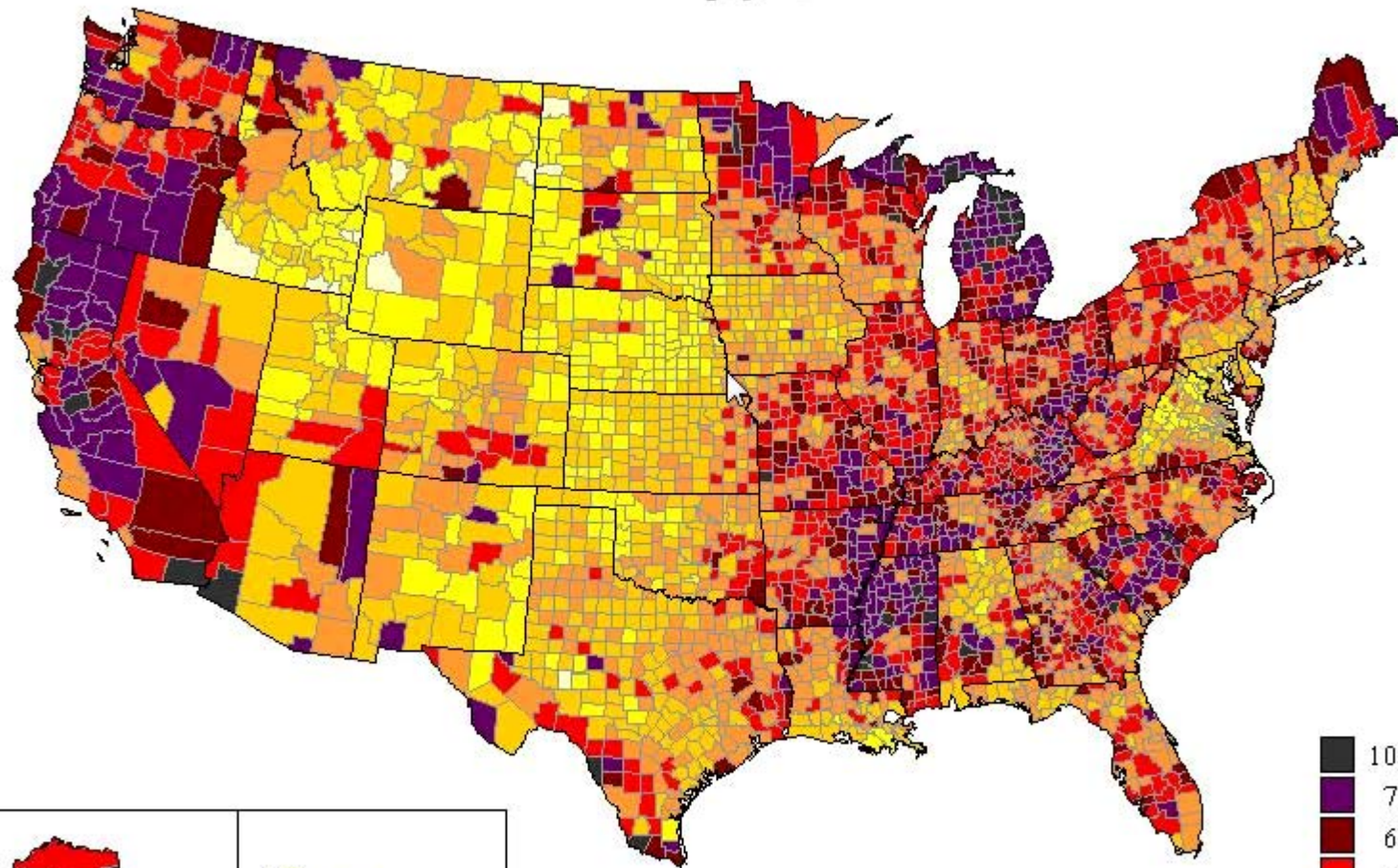
May 2008

4.9%



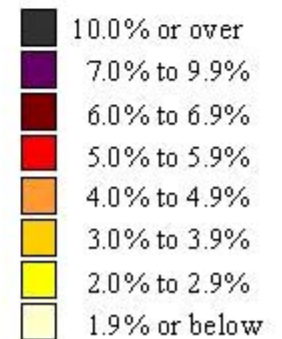
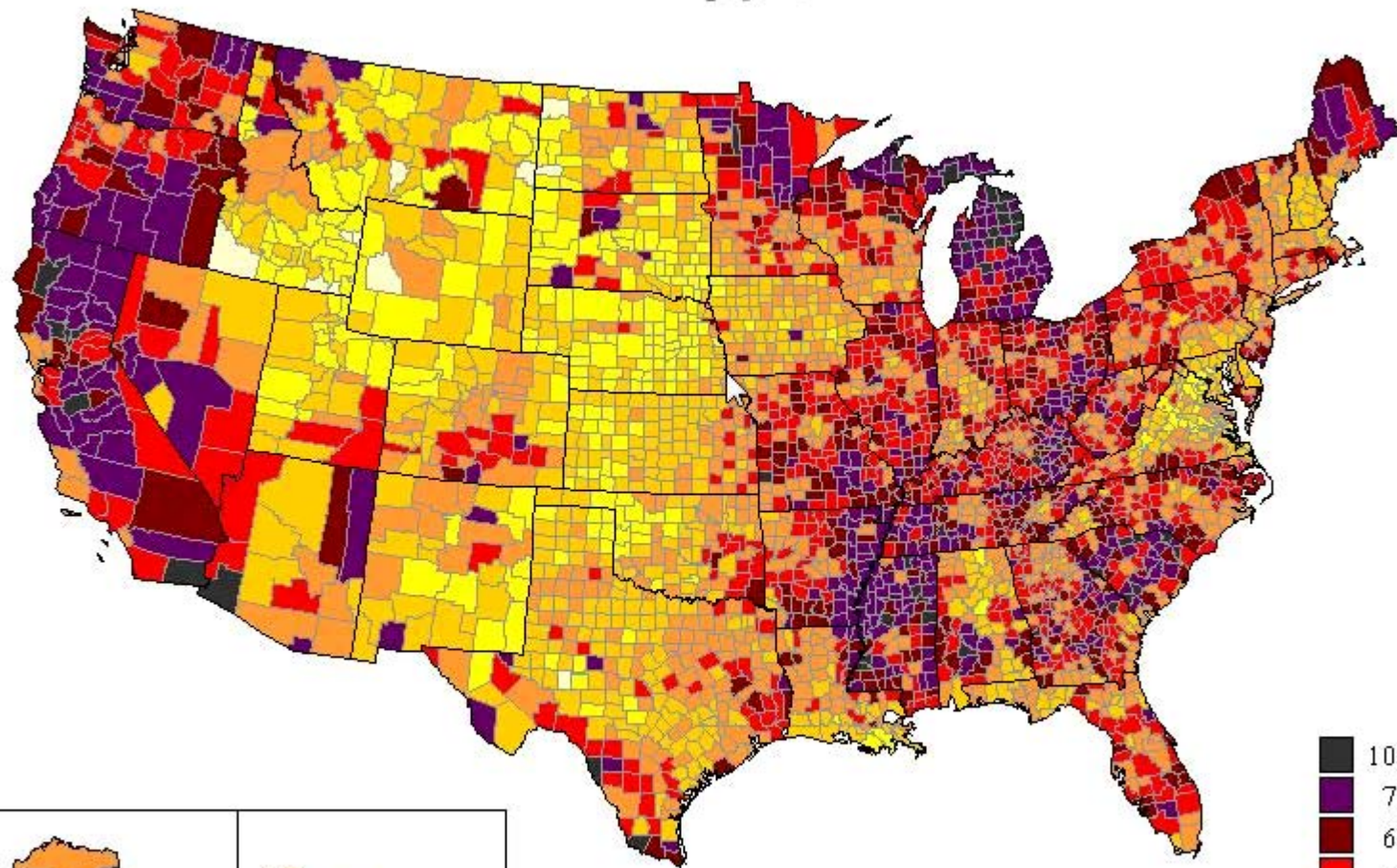
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County May 2008 4.9%



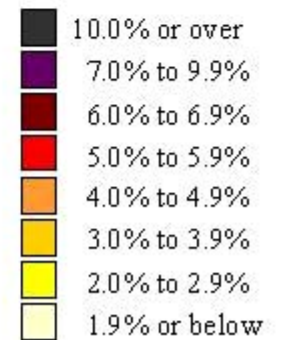
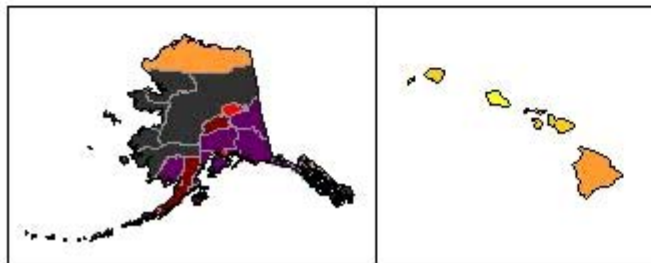
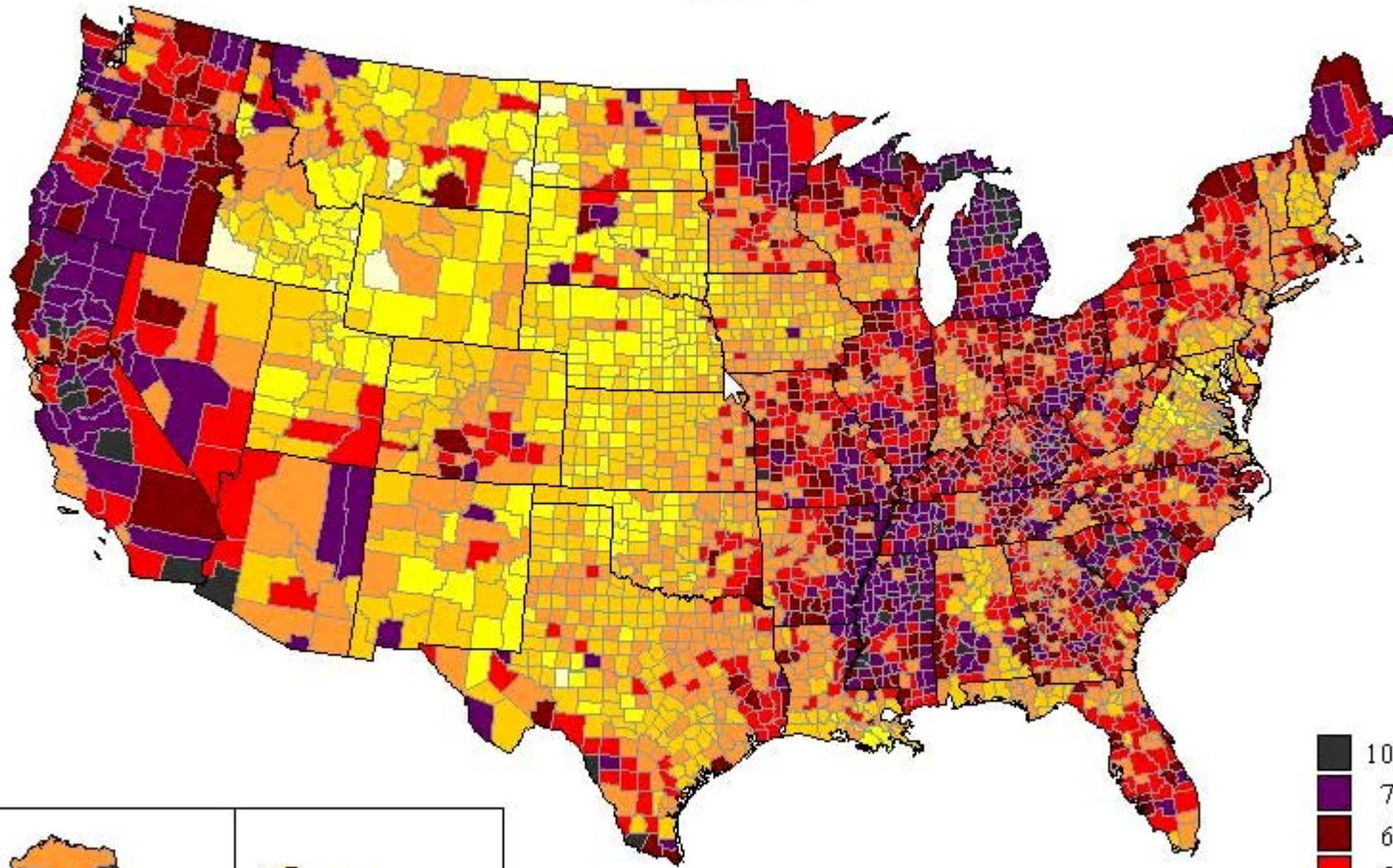
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County June 2008 4.9%



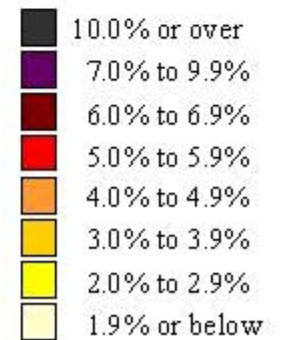
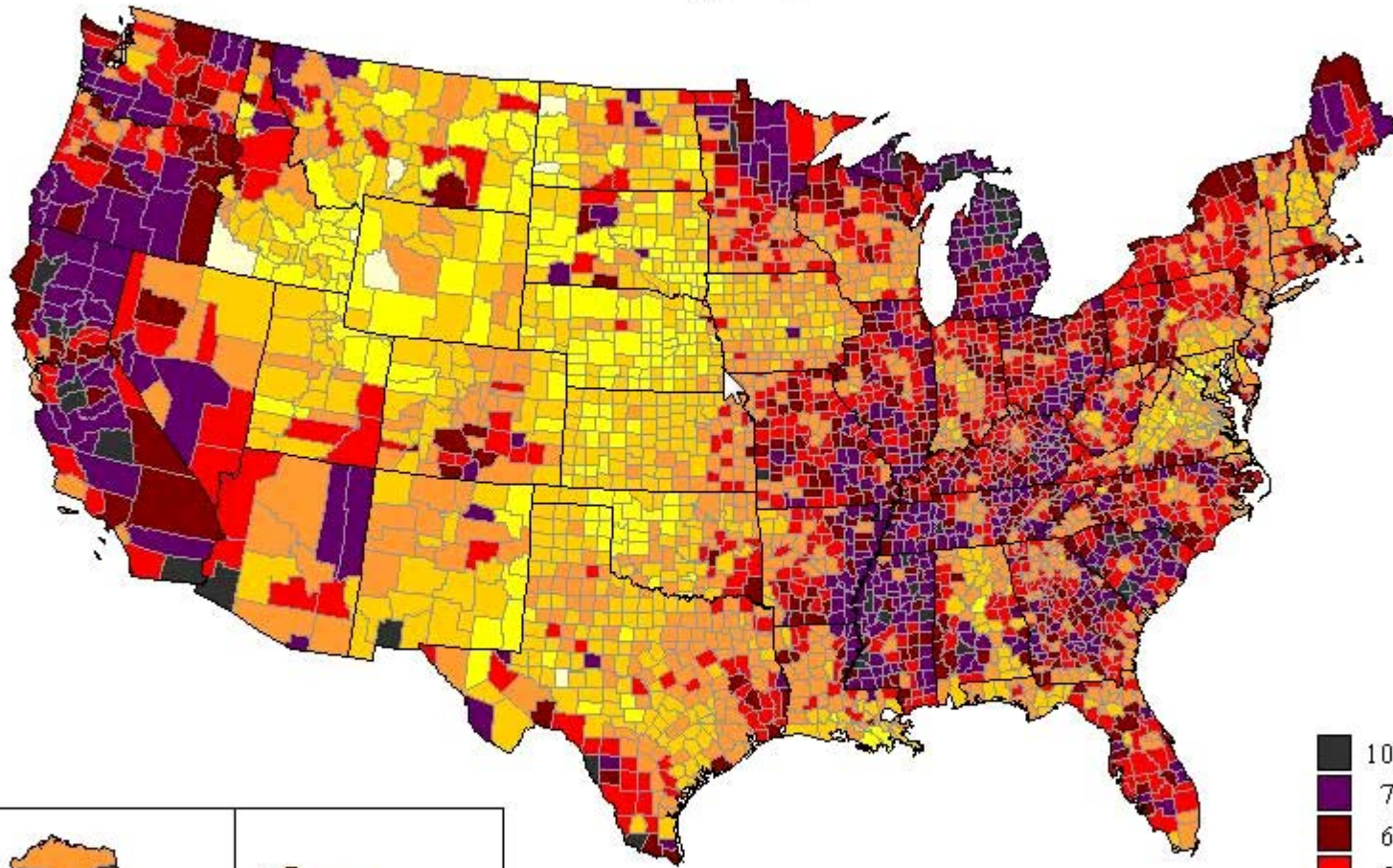
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County July 2008 5.0%



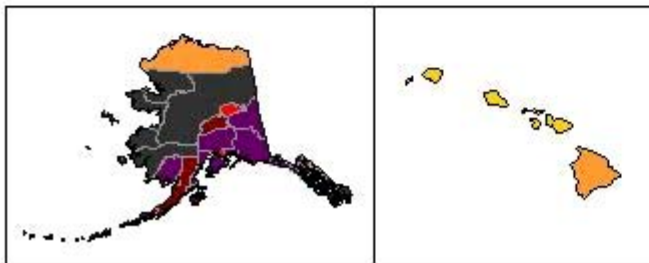
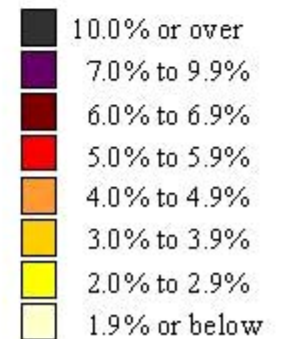
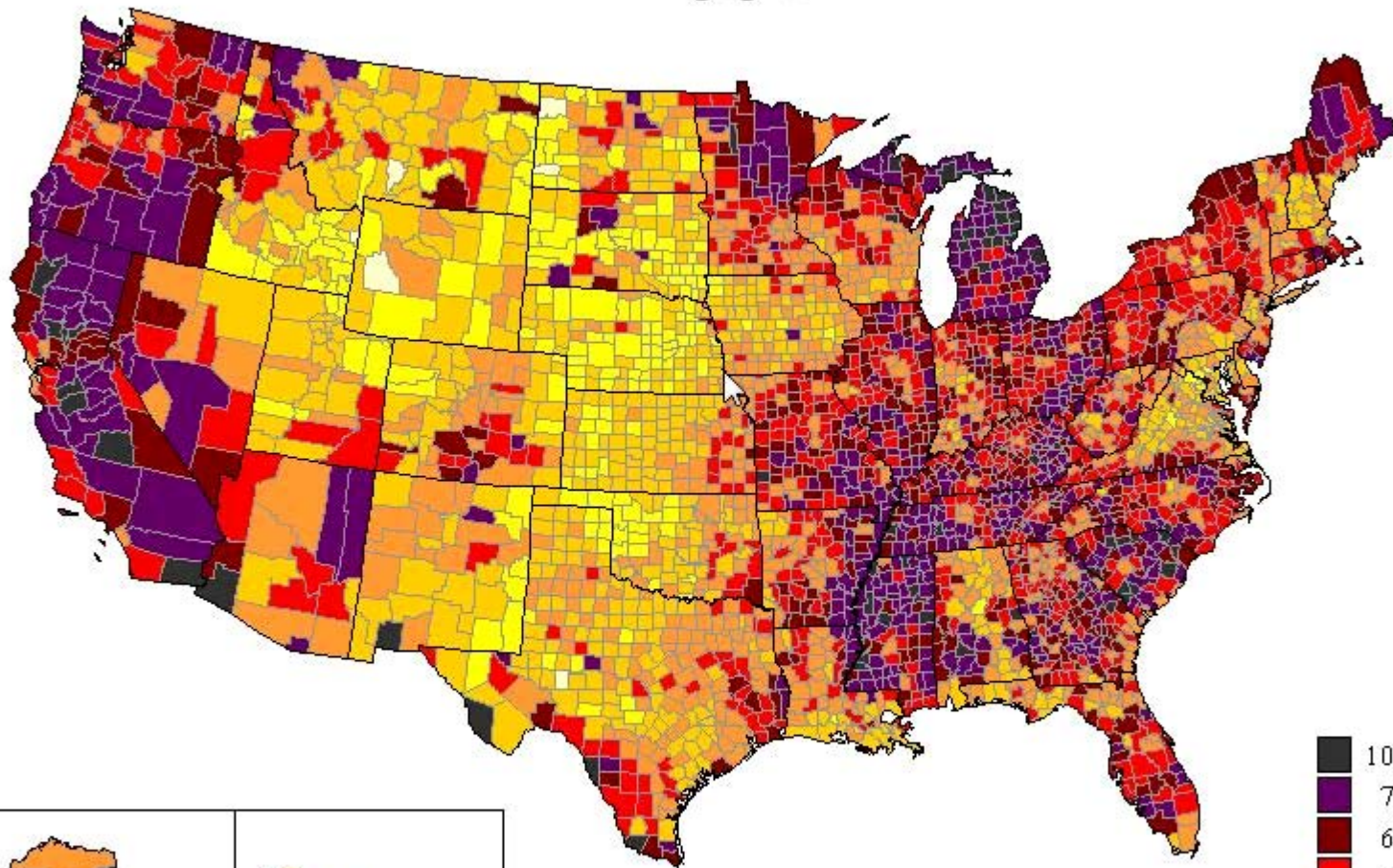
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County August 2008 5.2%



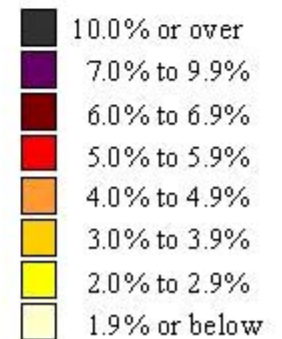
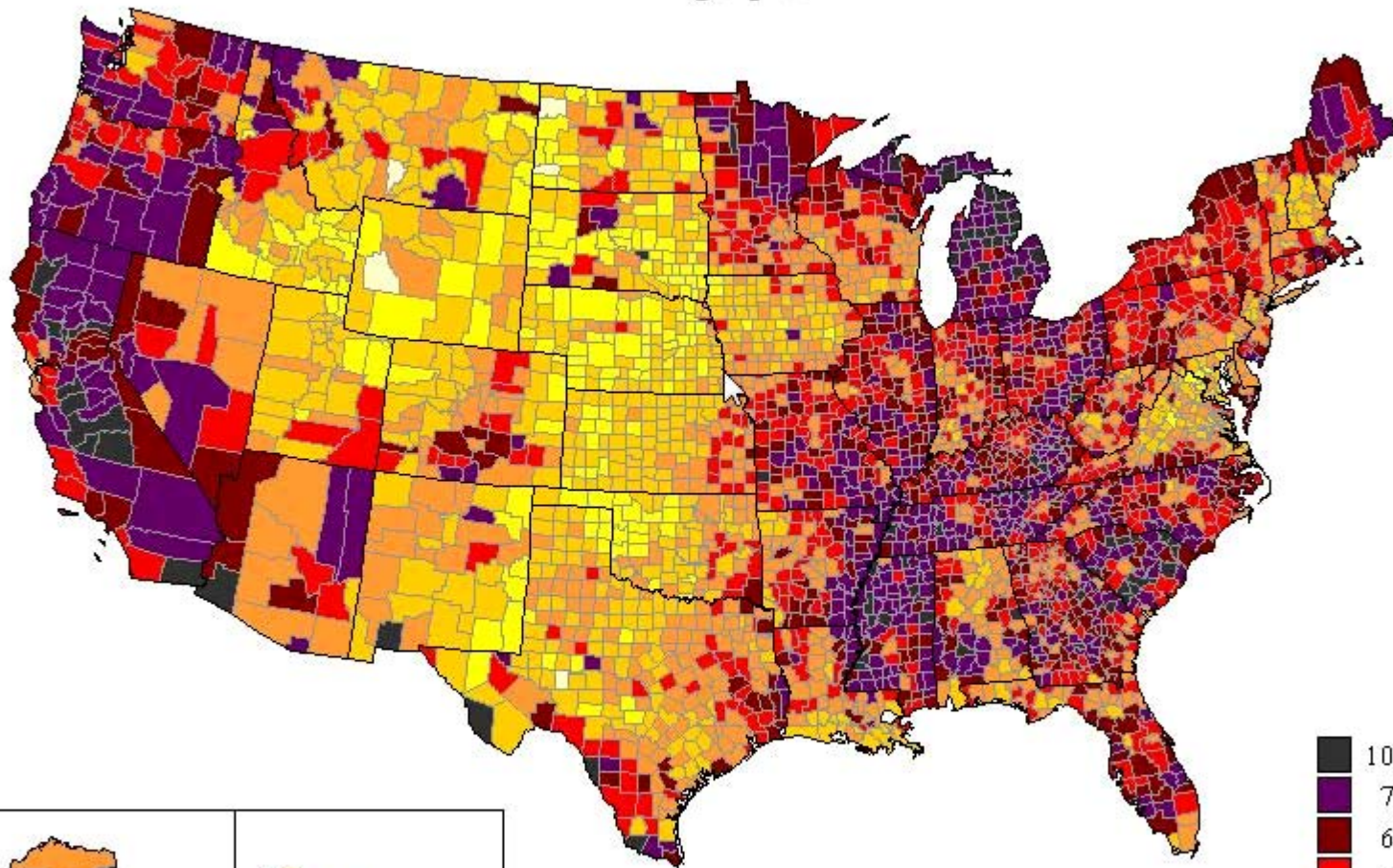
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County September 2008 5.3%



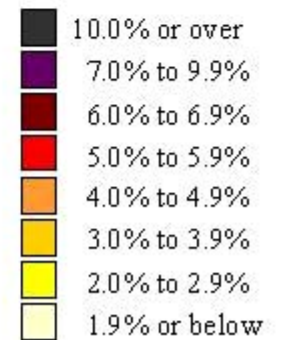
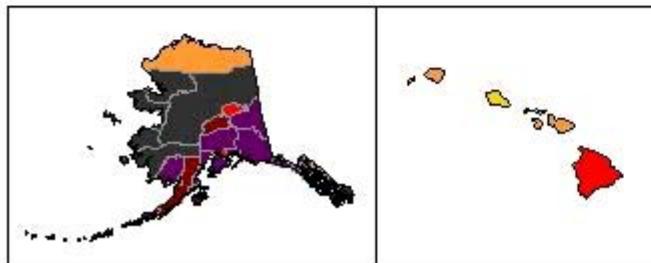
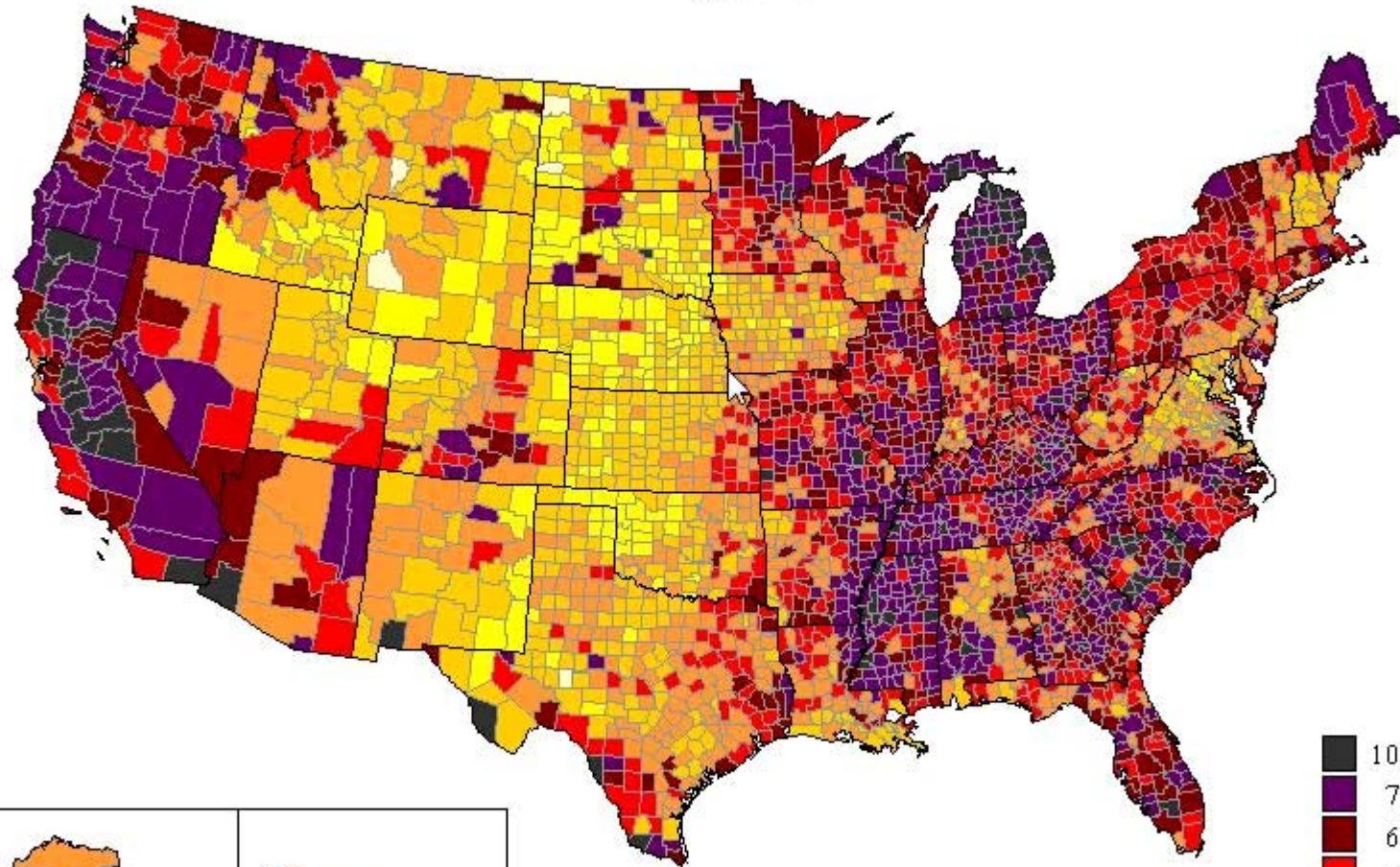
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County October 2008 5.4%



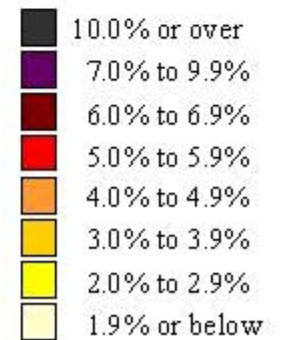
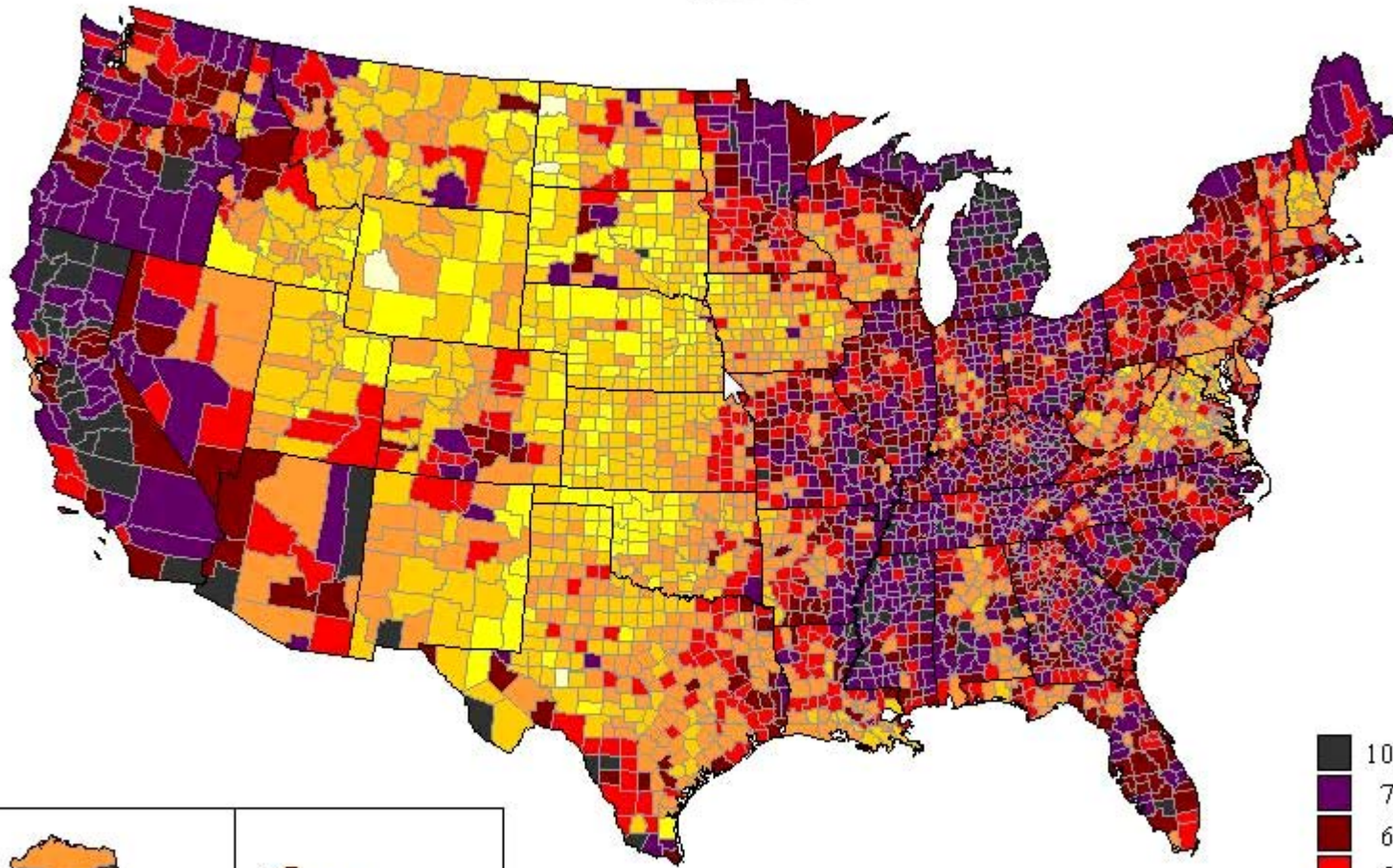
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County November 2008 5.6%



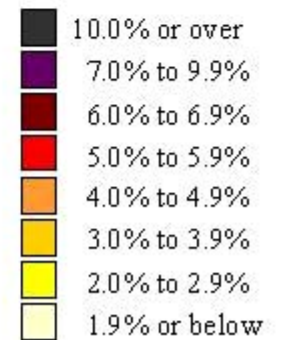
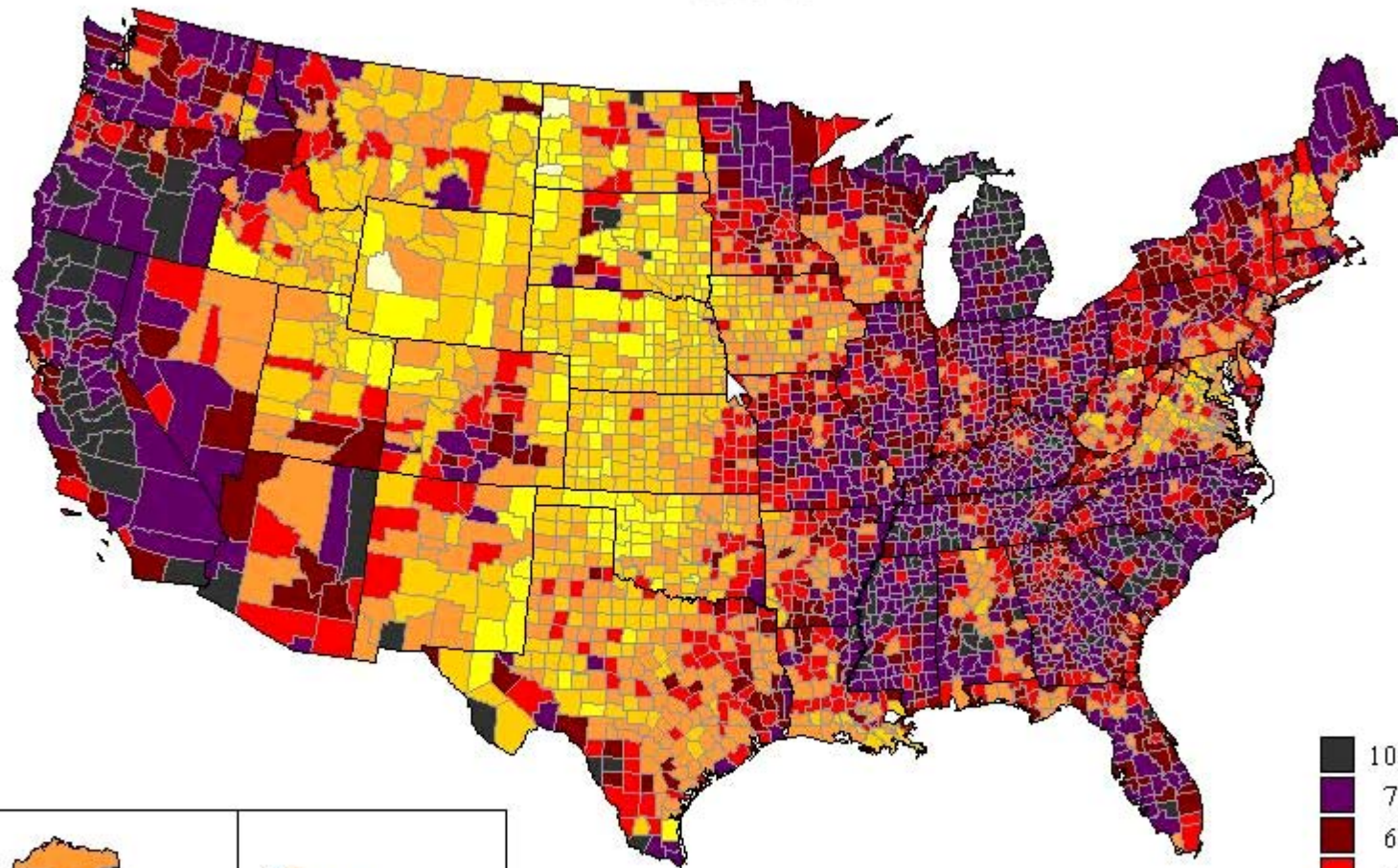
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County December 2008 5.8%



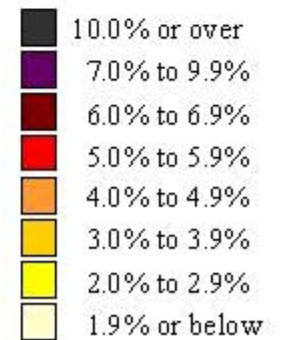
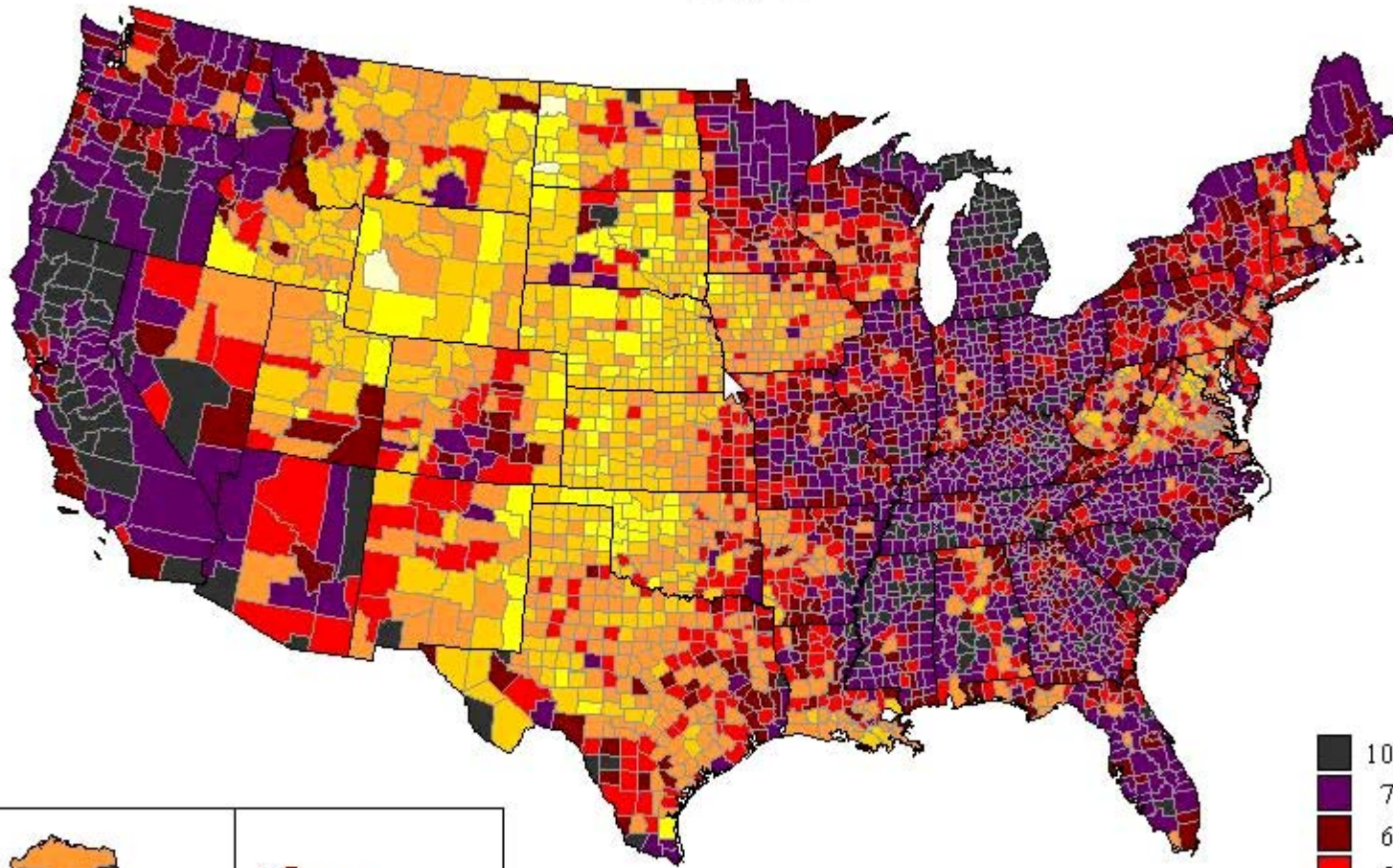
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County January 2009 6.0%



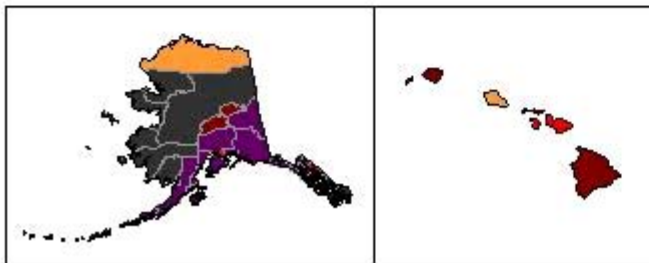
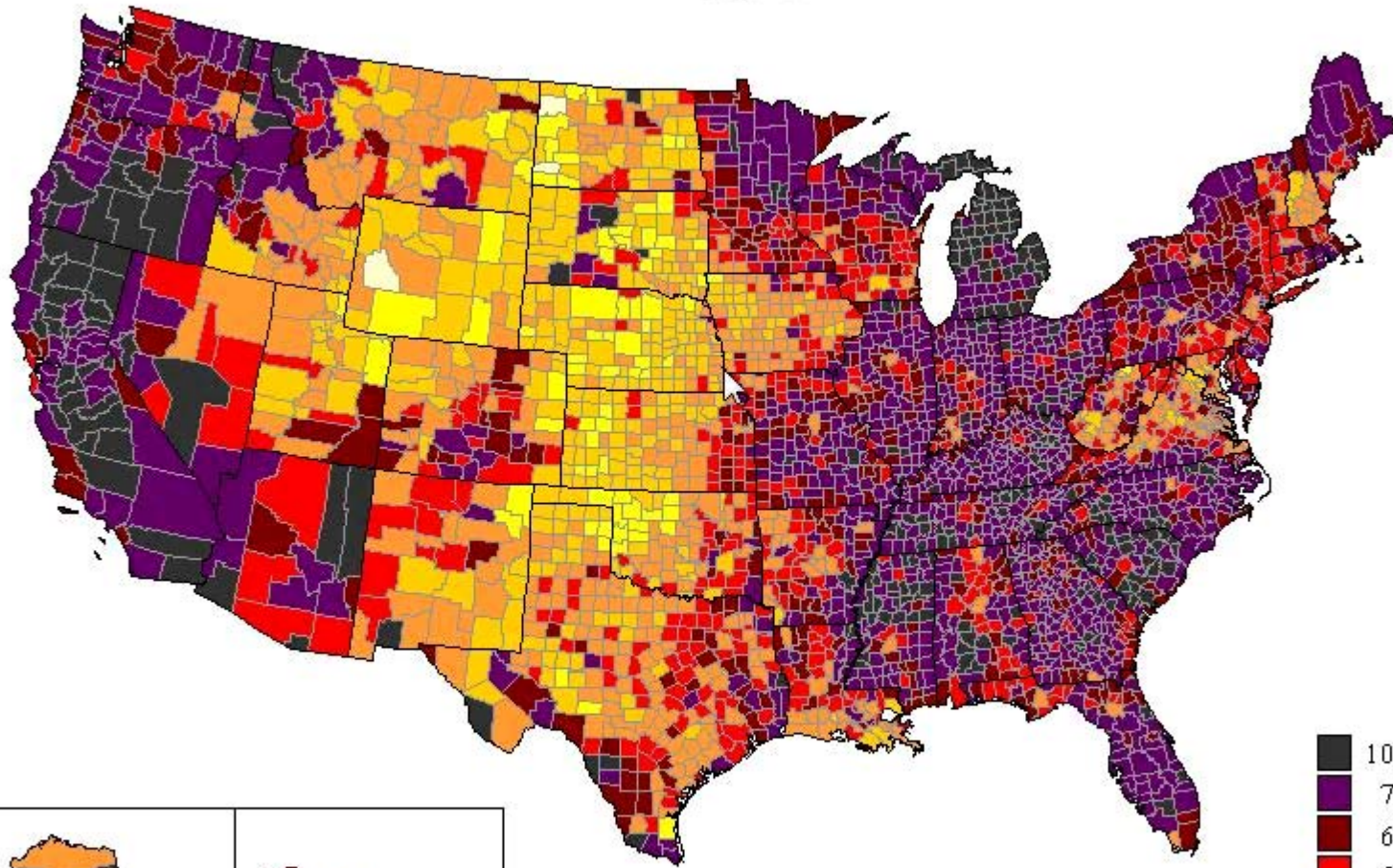
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County February 2009 6.3%



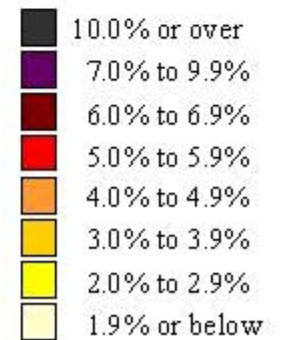
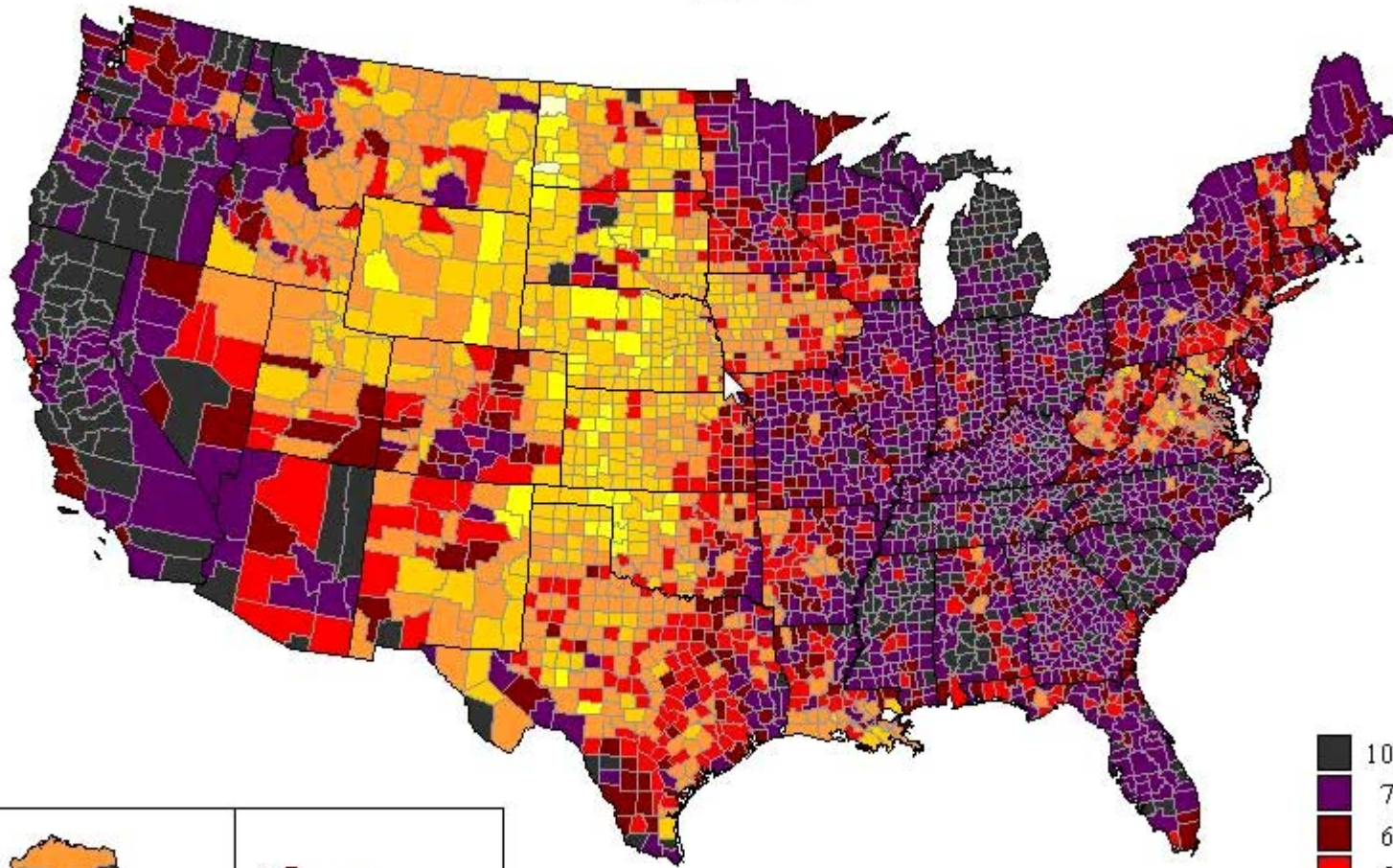
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County March 2009 6.7%



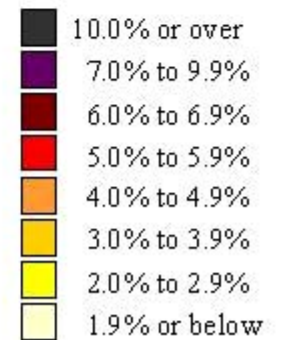
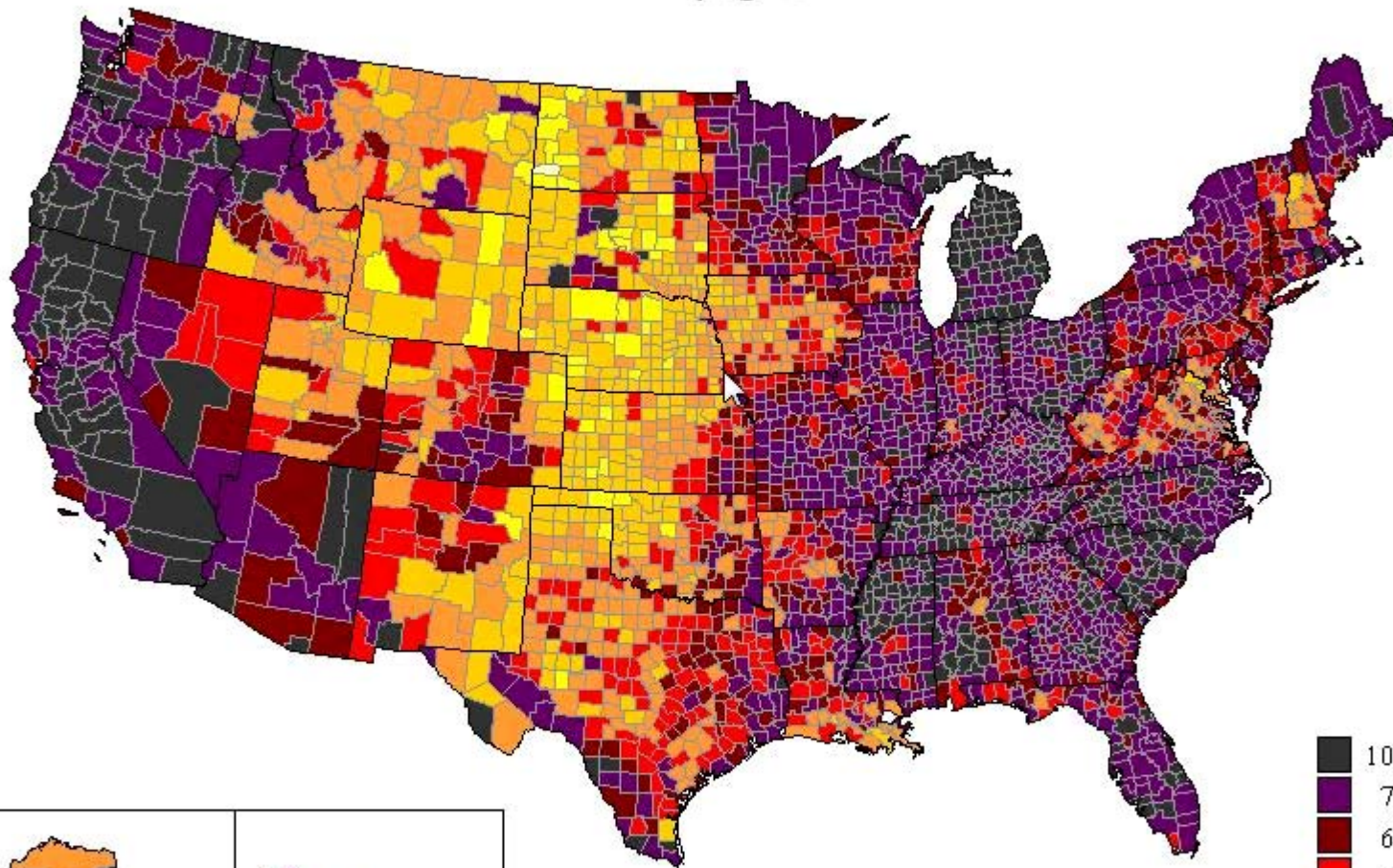
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County April 2009 7.0%



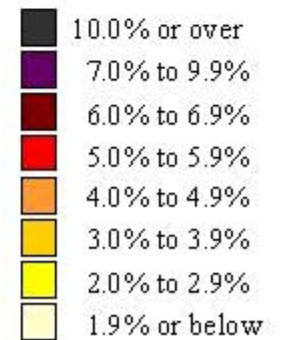
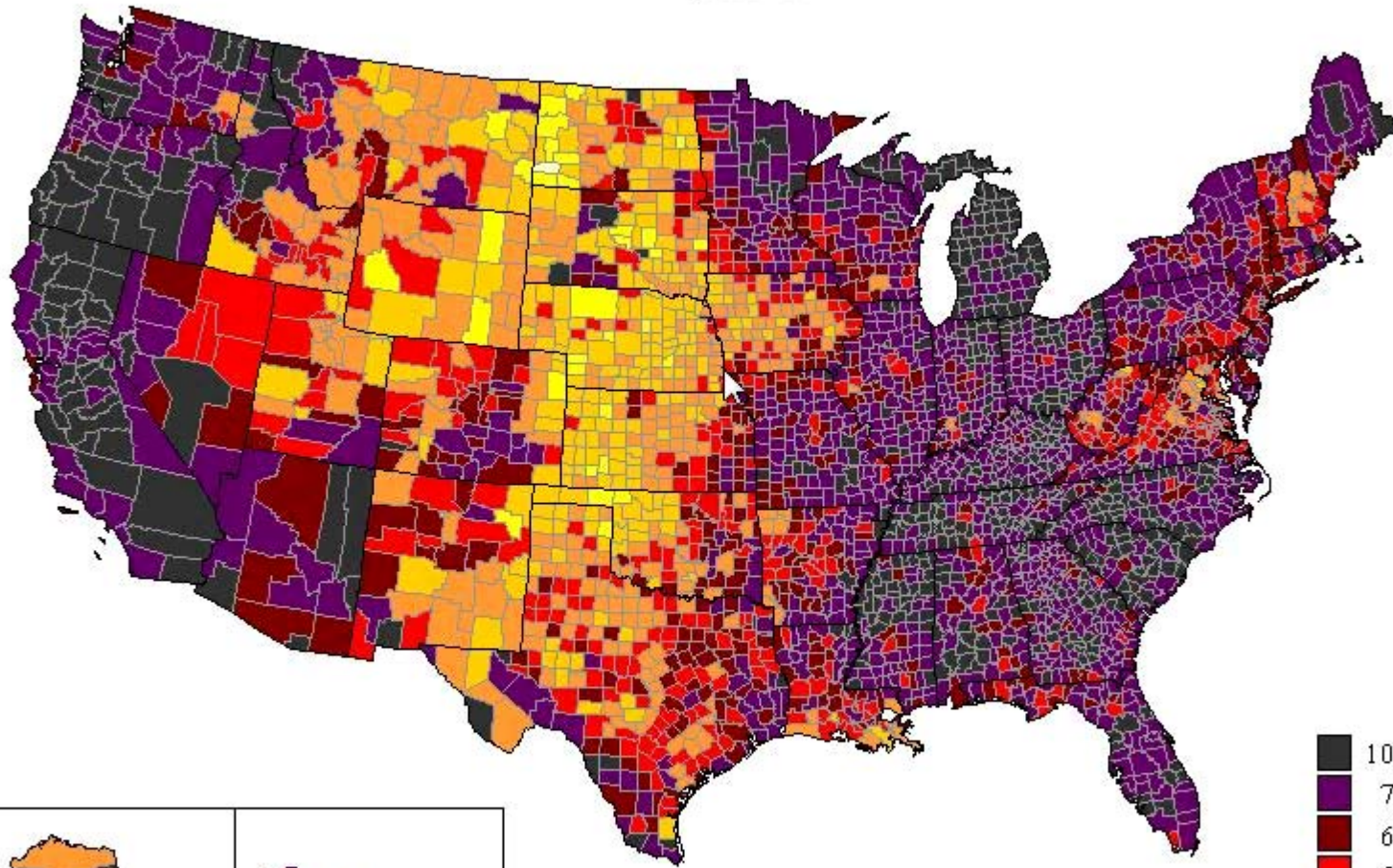
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County May 2009 7.3%



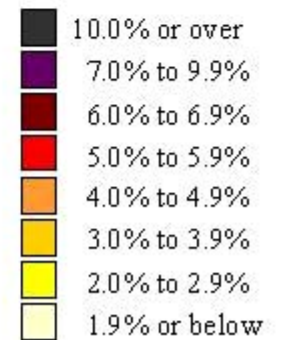
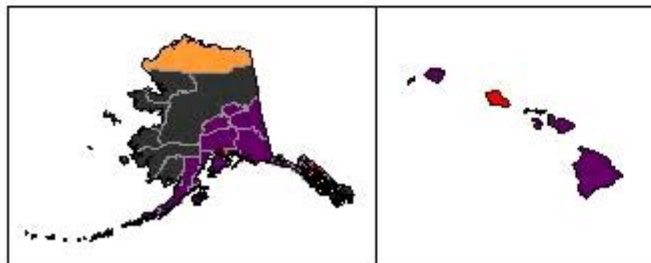
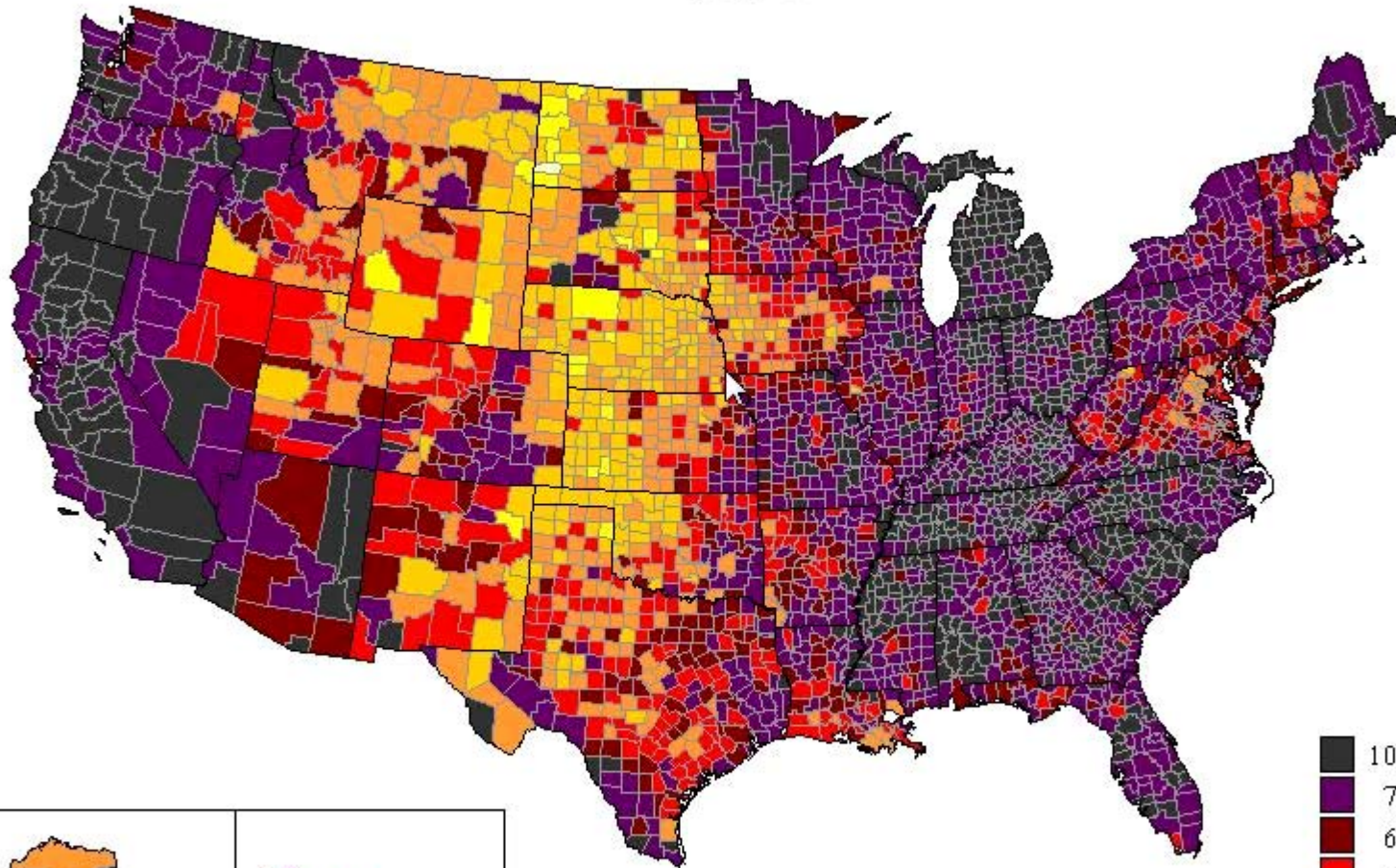
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County June 2009 7.6%



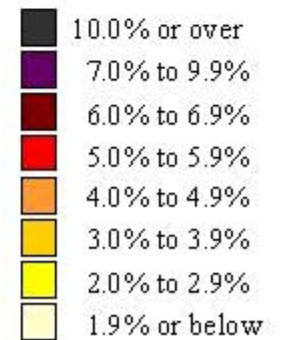
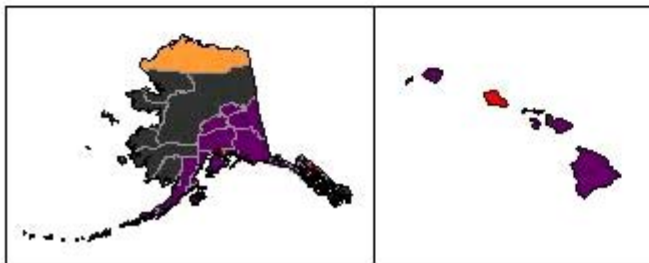
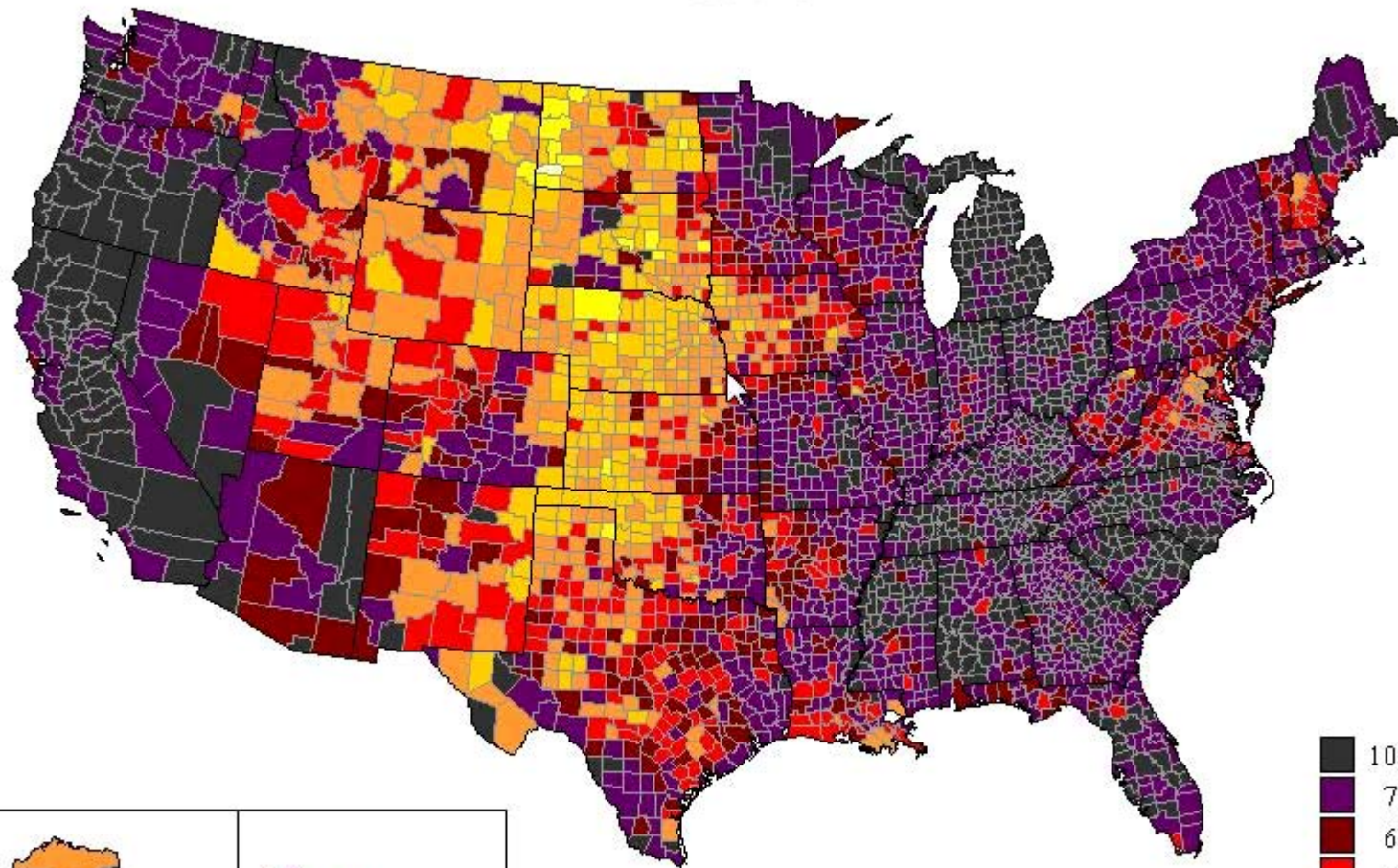
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County July 2009 7.9%



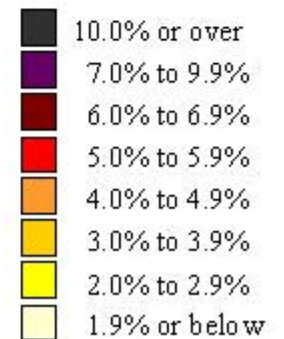
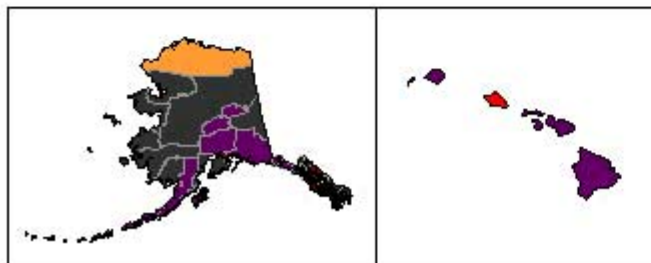
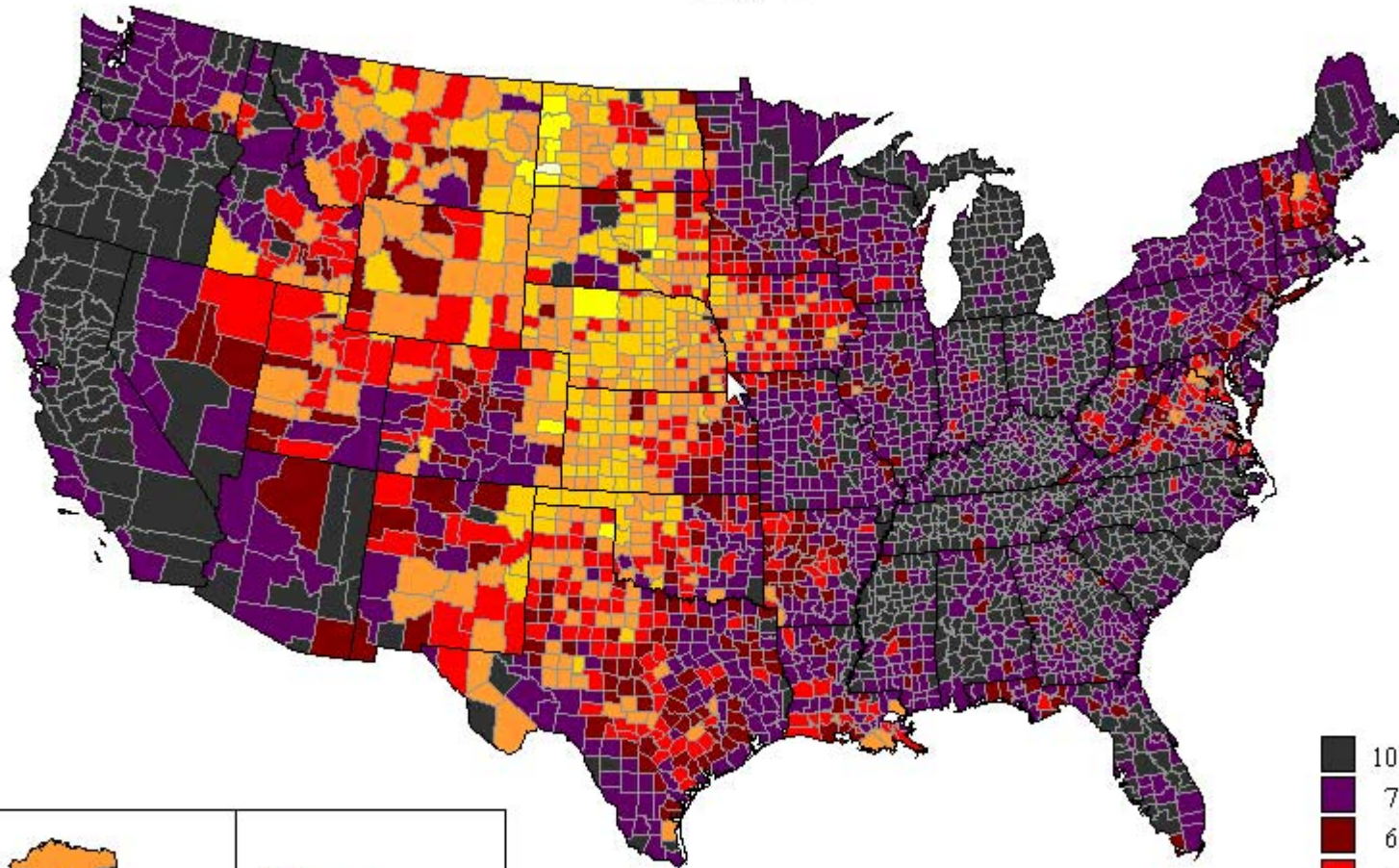
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County August 2009 8.2%



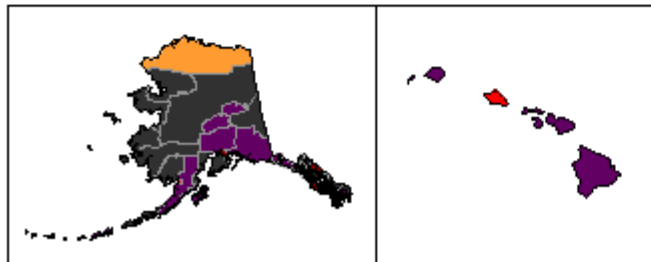
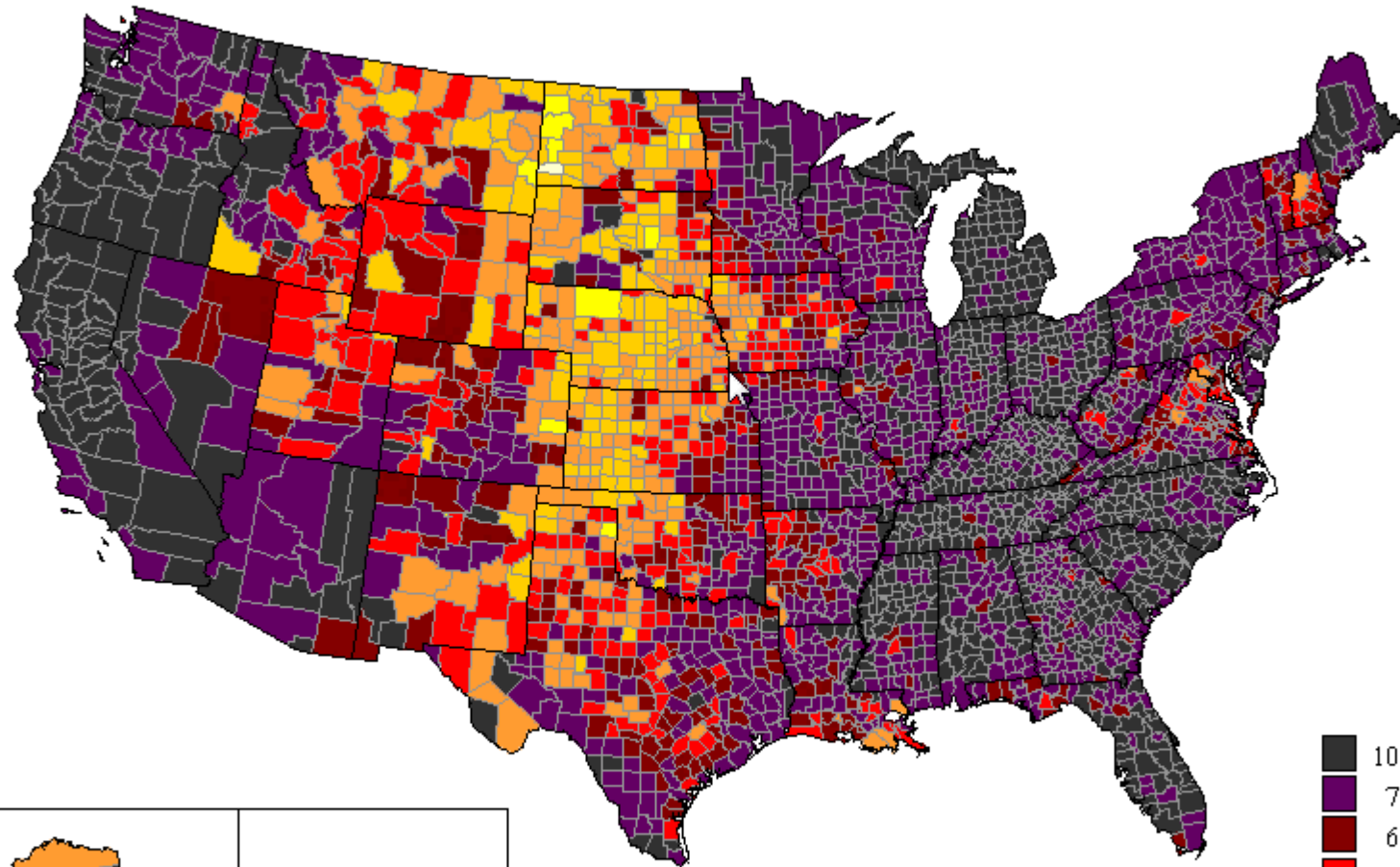
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County September 2009 8.5%



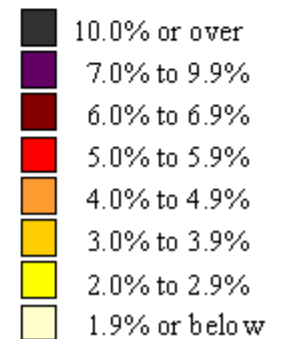
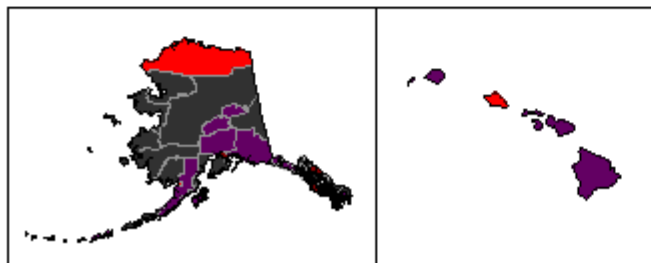
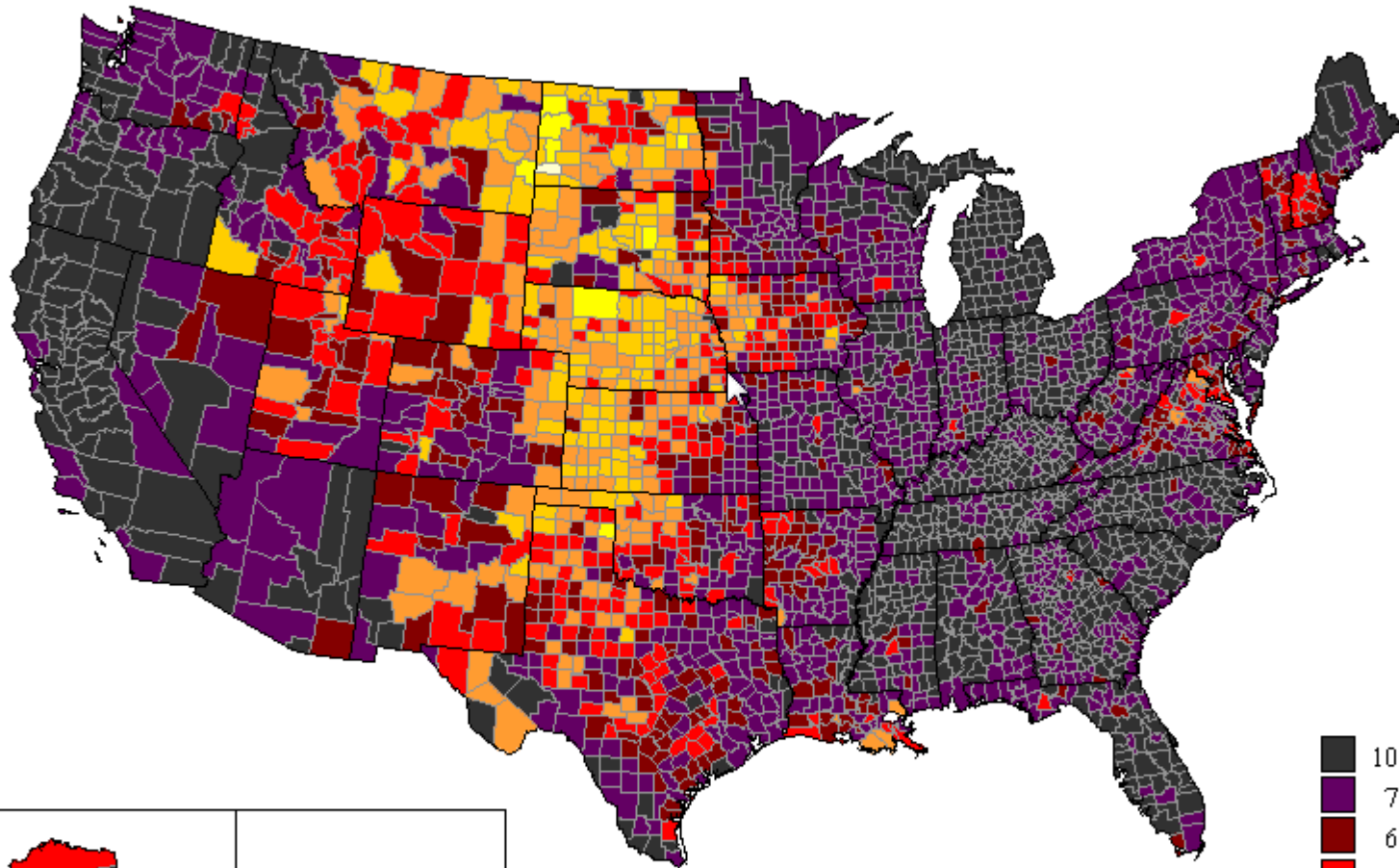
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County October 2009 8.8%



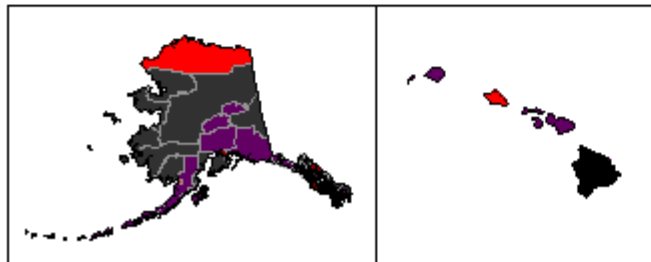
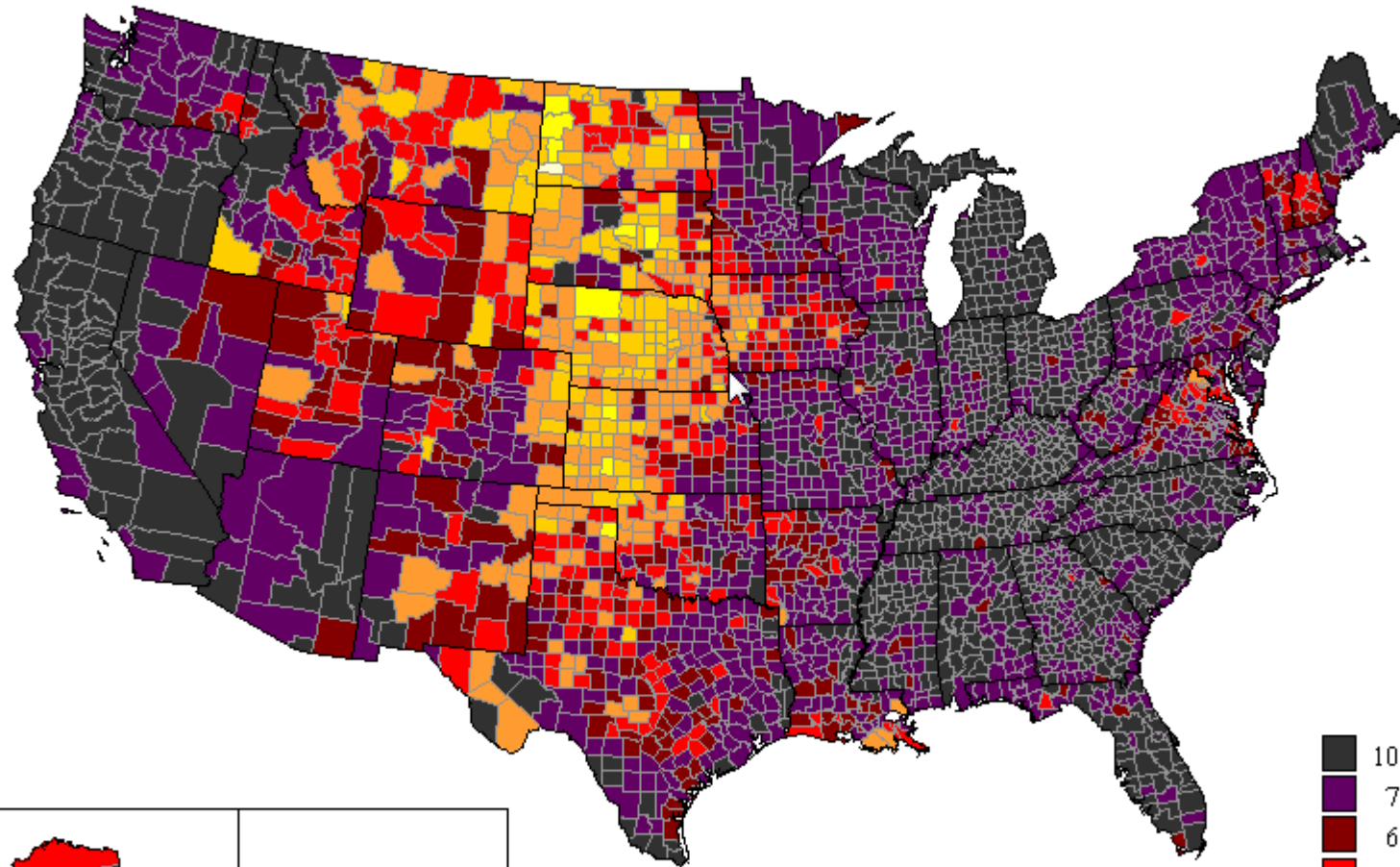
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County November 2009 9.0%



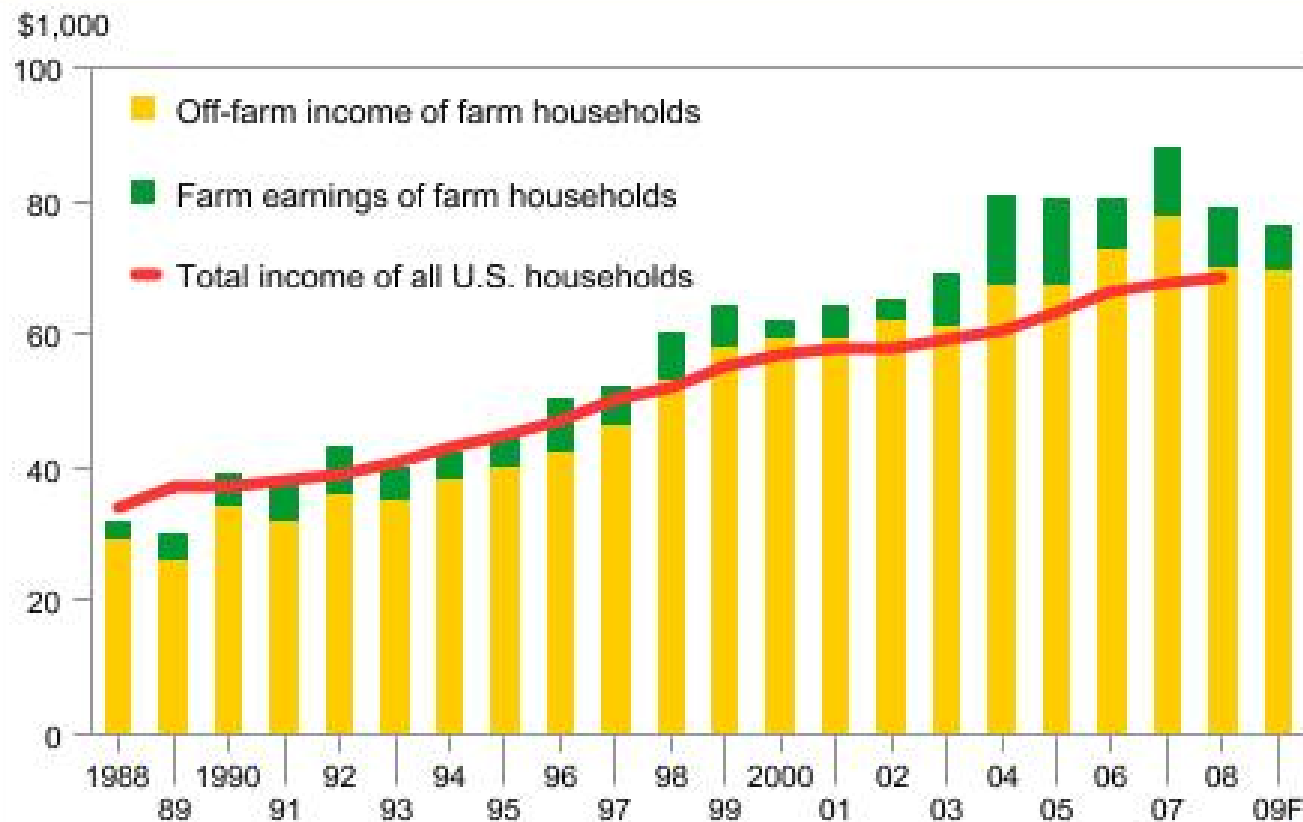
Source: BLS and Latoya Egwuekwe

Unemployment Rates by County December 2009 9.3%



Source: BLS and Latoya Egwuekwe

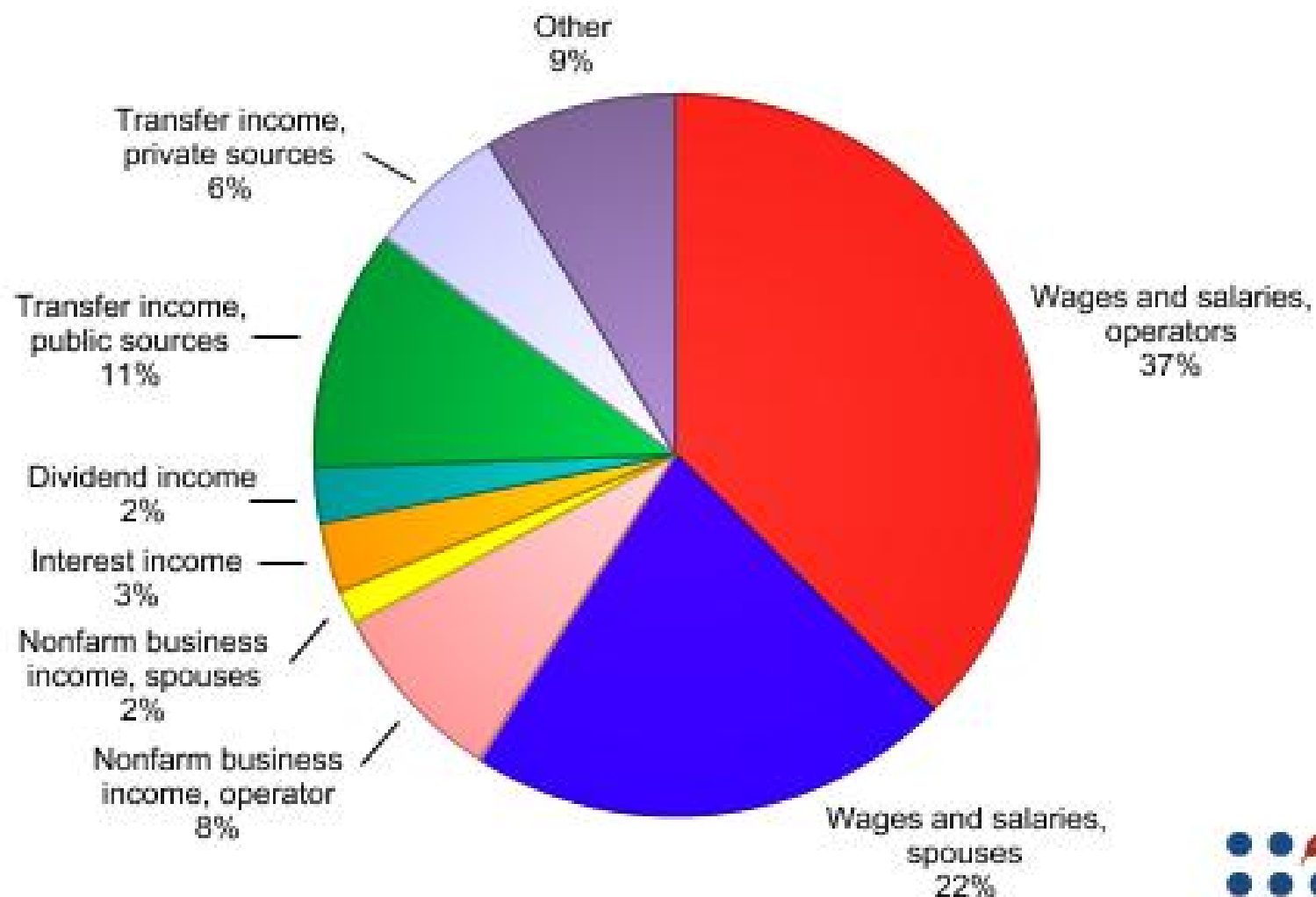
Average farm operator household income, by source, compared with U.S. household income, 1988-2009F



Source: Agricultural Resource Management Survey, ERS and NASS, USDA and the Current Population Survey, U.S. Bureau of the Census.



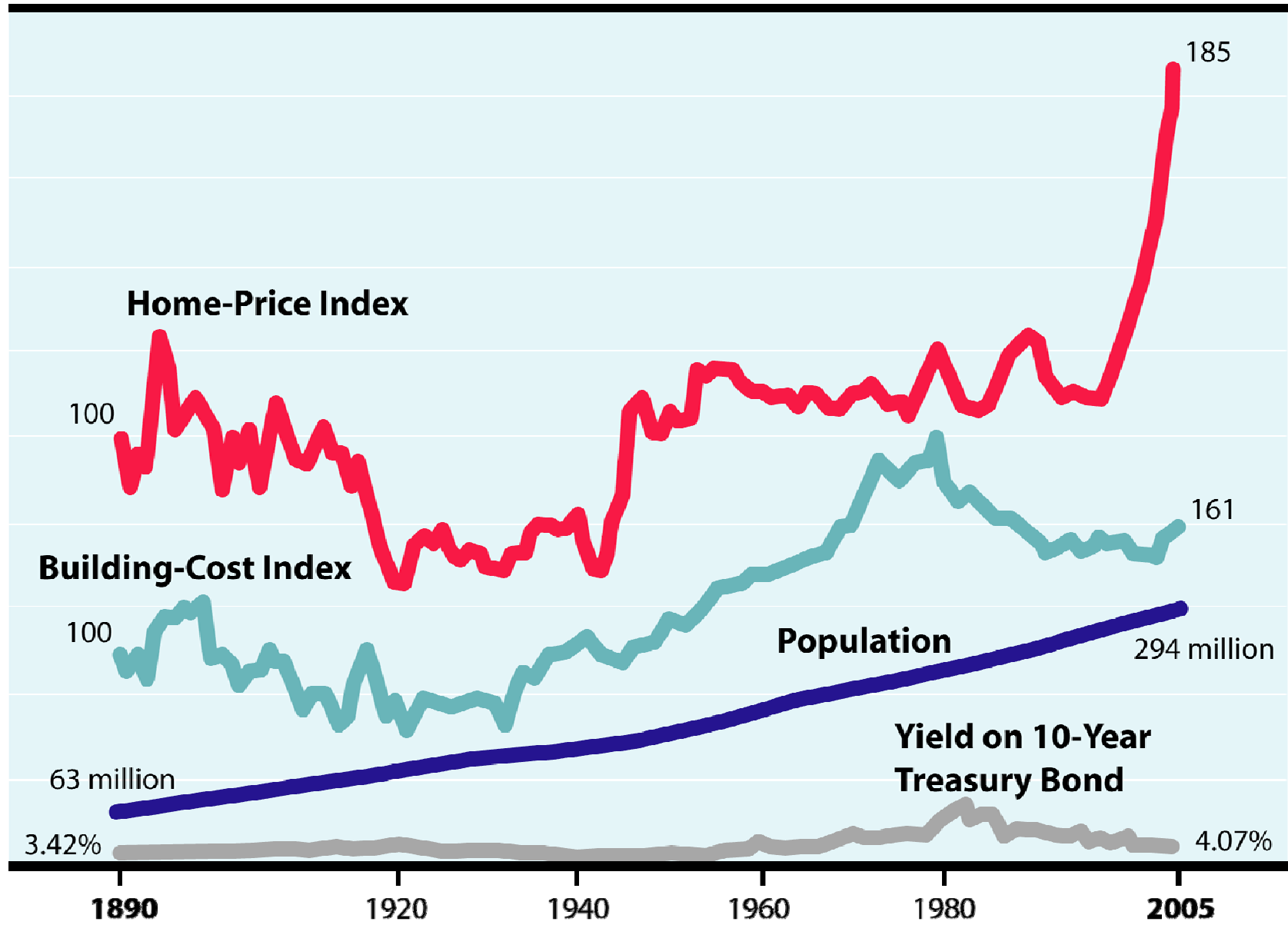
Sources of off-farm income for farm operator households, 2008



Source: Agricultural Resource Management Survey, ERS and NASS, USDA.



Inflation-adjusted U.S. home prices, Population, Building costs, and Bond yields (1890–2005)

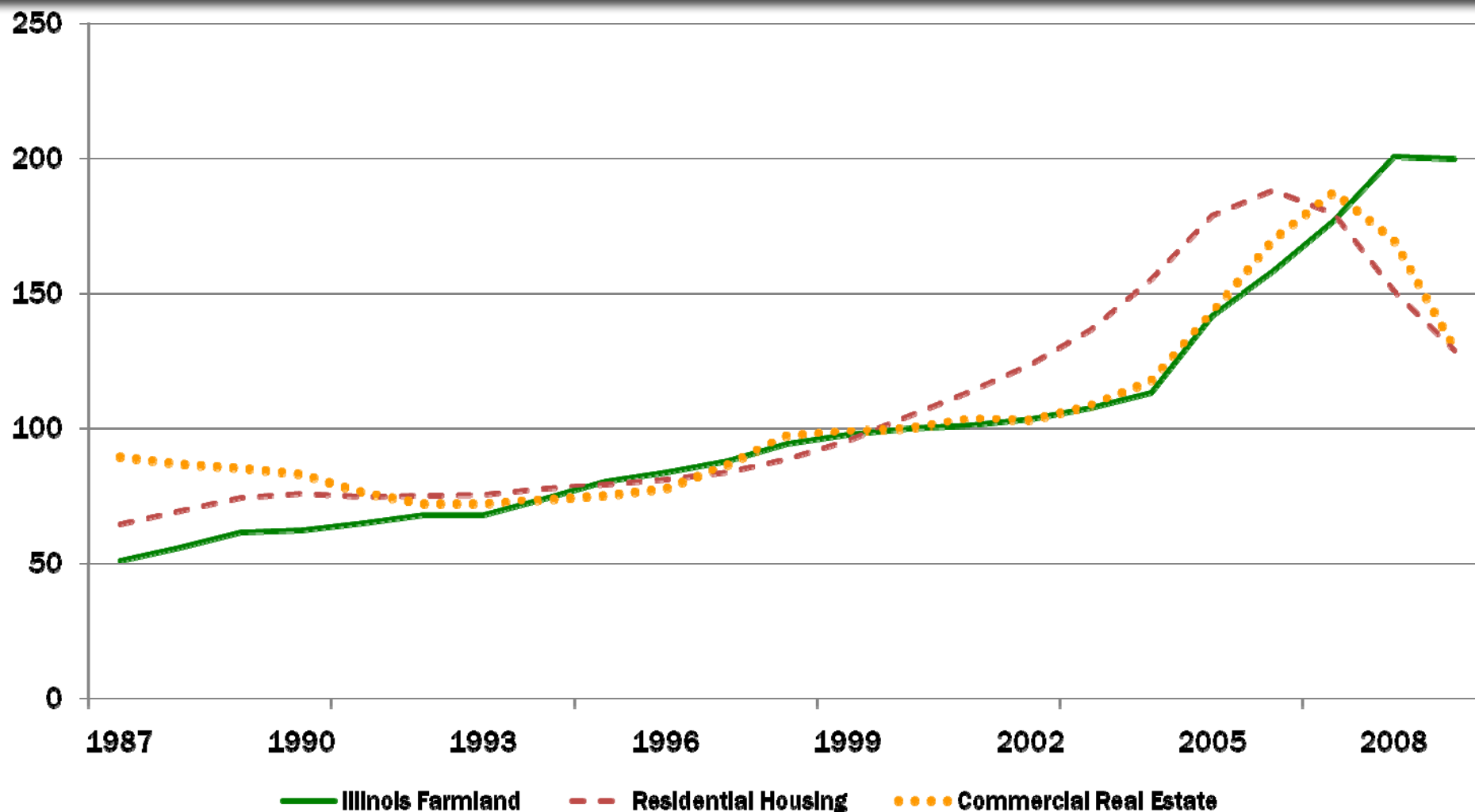


Source: *Irrational Exuberance*, 2d ed. (Fig. 2.1)

Commercial, Residential and Farm Real Estate Prices



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Base = 2000

Farmland prices



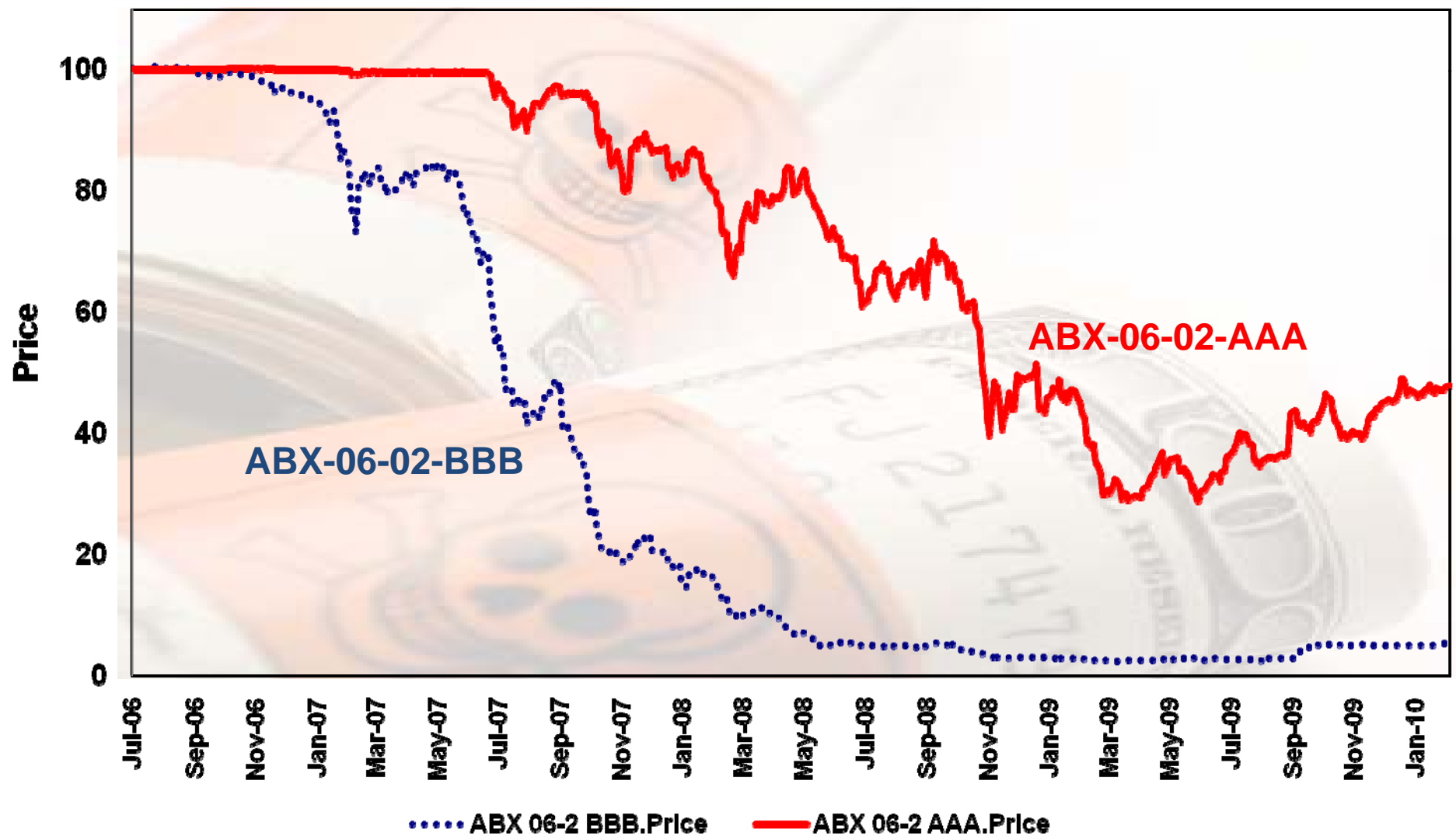
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	Dow Index	Case Shiller House Price Index/Year	Chicago House Price Index	Midwest Farmland Total Return
1999-2008	1.10%	5.89%	3.00%	12.70%
2007	6.20%	-10.30%	-4.70%	16.20%
2008	-45.50%	-21.40%	-15.40%	18.90%
2009 to Dec	11.98%	0.41%	1.01%	-0.50%

Price of Legacy/Toxic Securities



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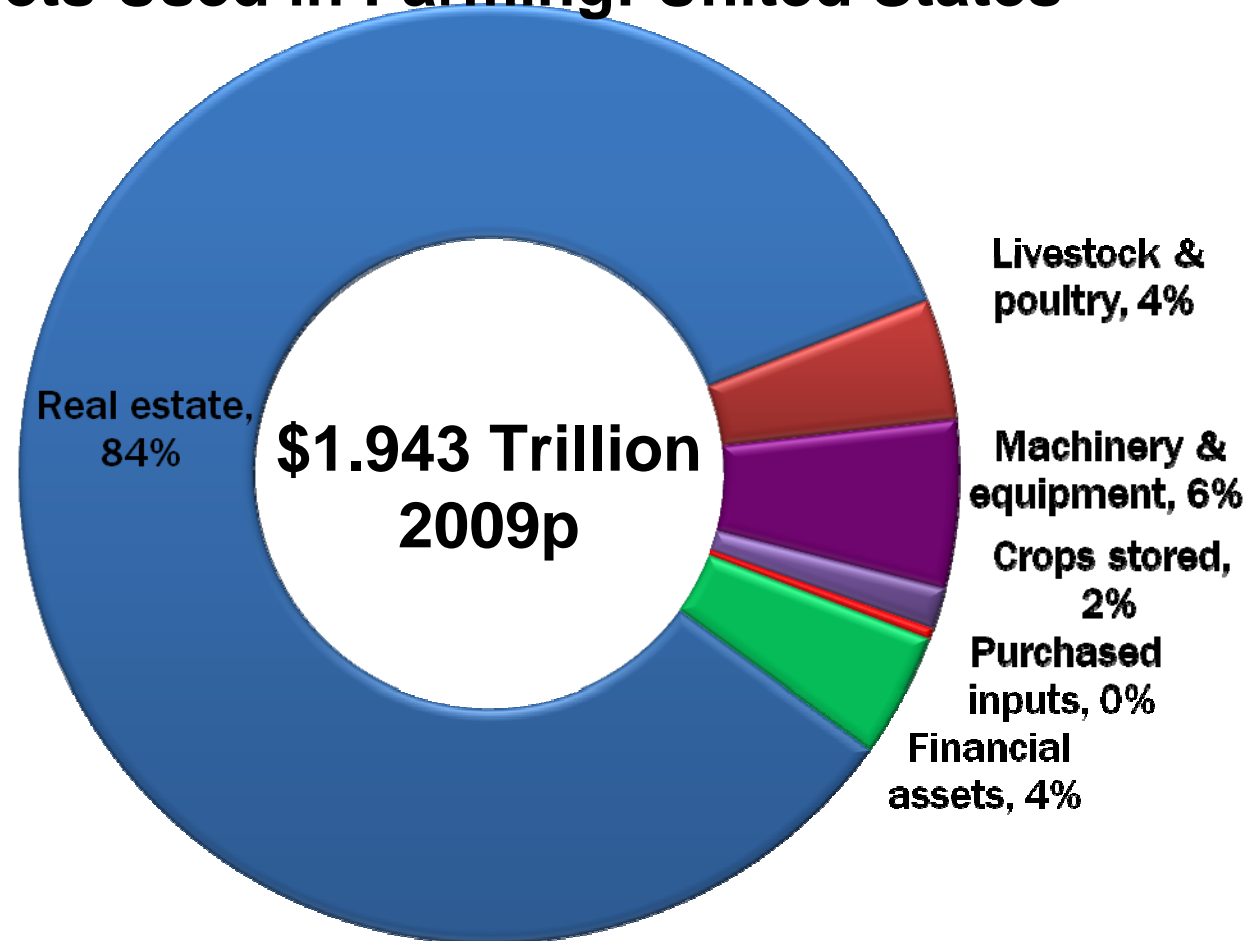
Significance of Farmland



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Total Assets Used in Farming: United States



Source: Economic Research Service

Current Economic Drivers

Farmland Prices



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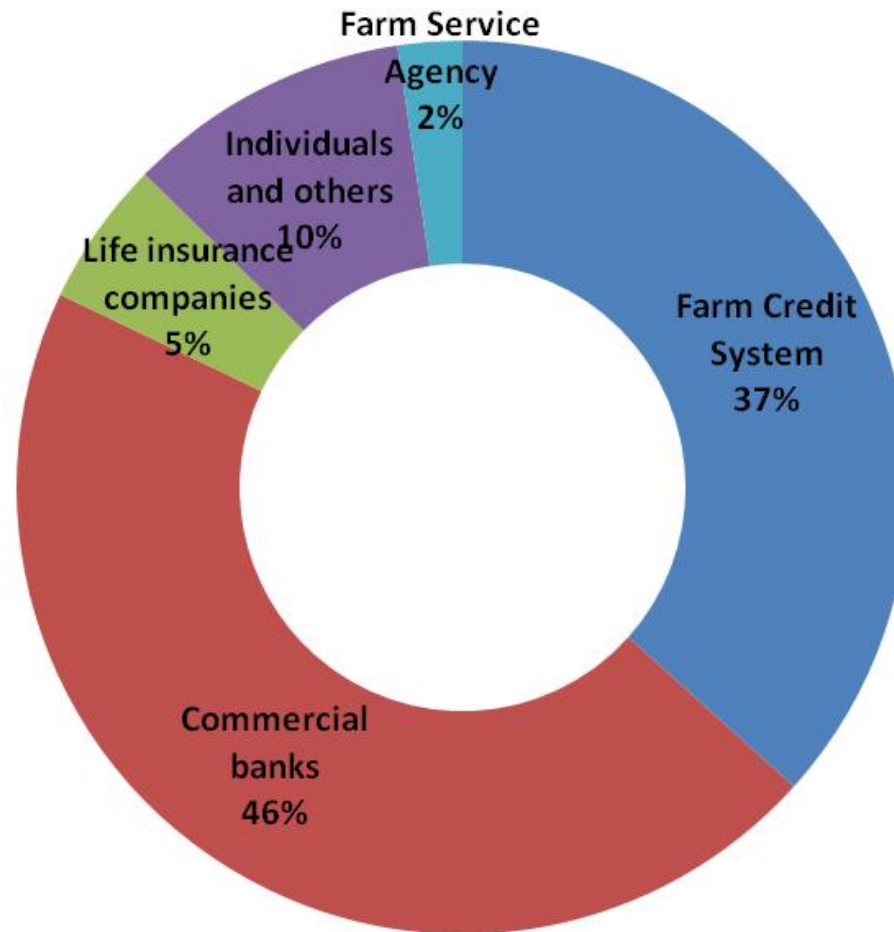
- Net returns to land
 - Level
 - Volatility
- Energy prices
- Interest / inflation rates
- Housing crisis
- Scope & economic situation of buyers
- Demand for recreational land
- Capital gains tax rates



Total Farm Debt



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Economic Research Service

\$239 Billion 2008

\$249 Billion 2009p

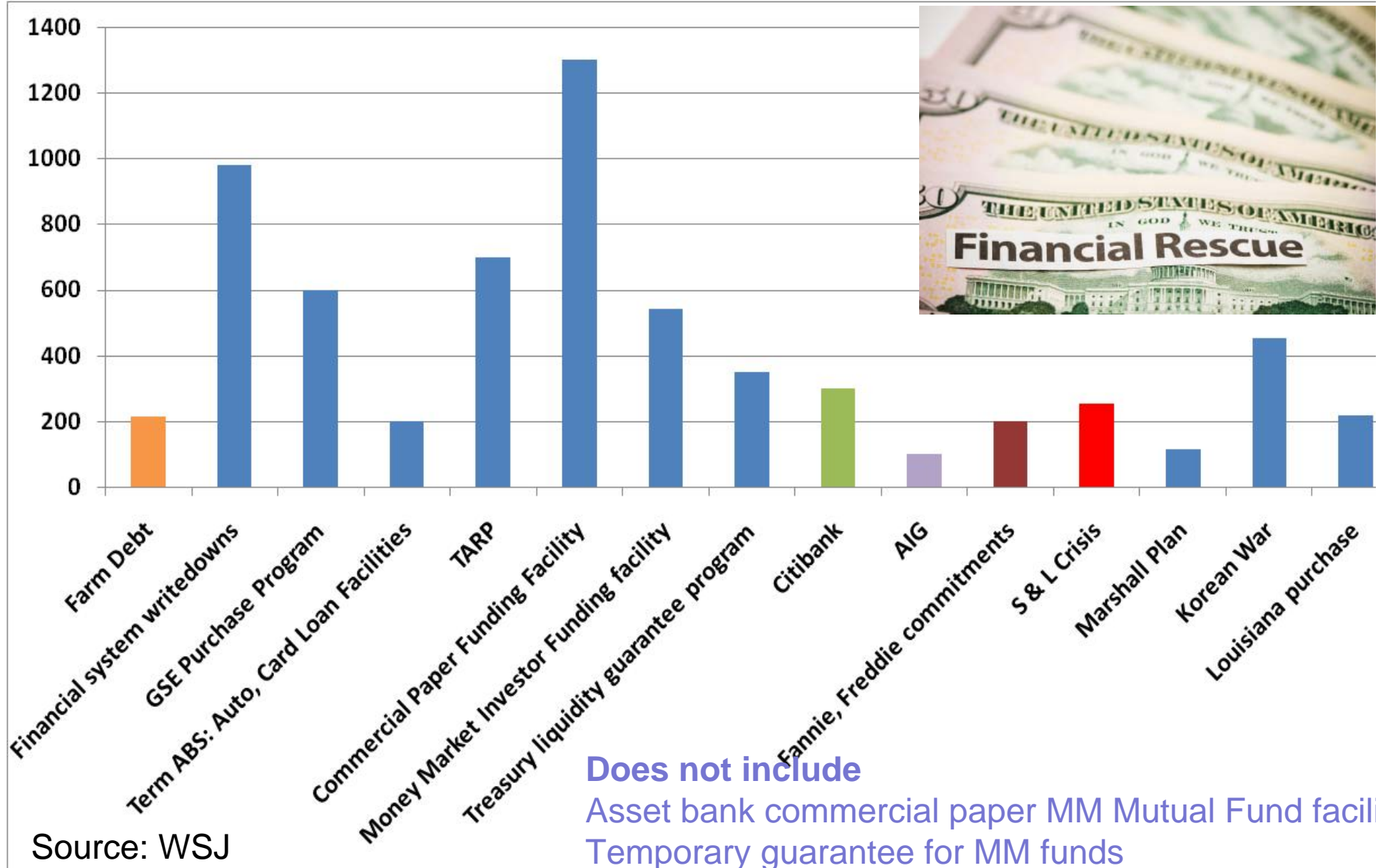
\$233 Billion 2010f

Does not include
other sectors of the
supply chain

Perspective of \$250 Billion



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Individual Lenders in Production Agriculture

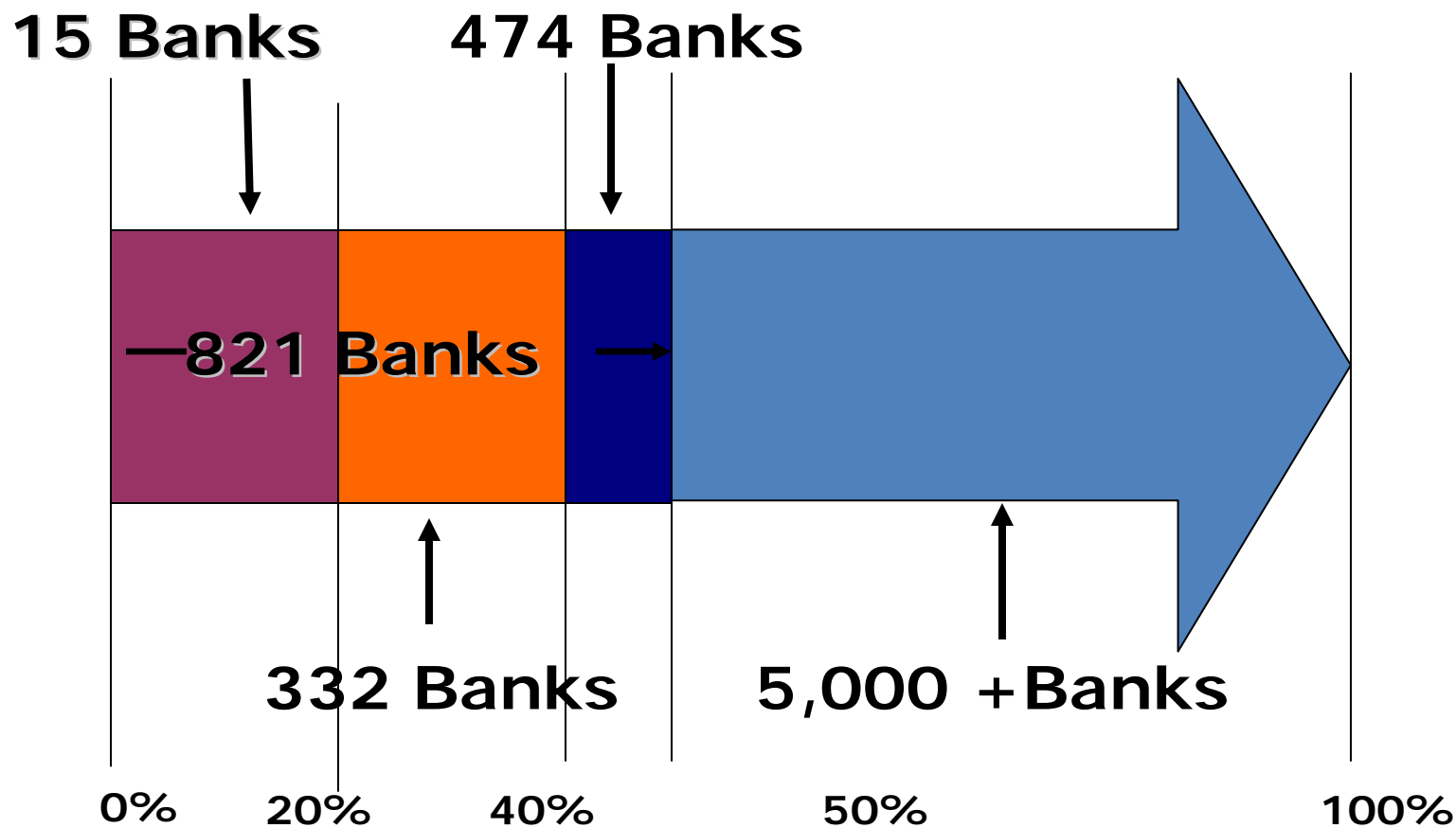


How Many Banks Does It Take?

% of Commercial Bank Loans to Agriculture



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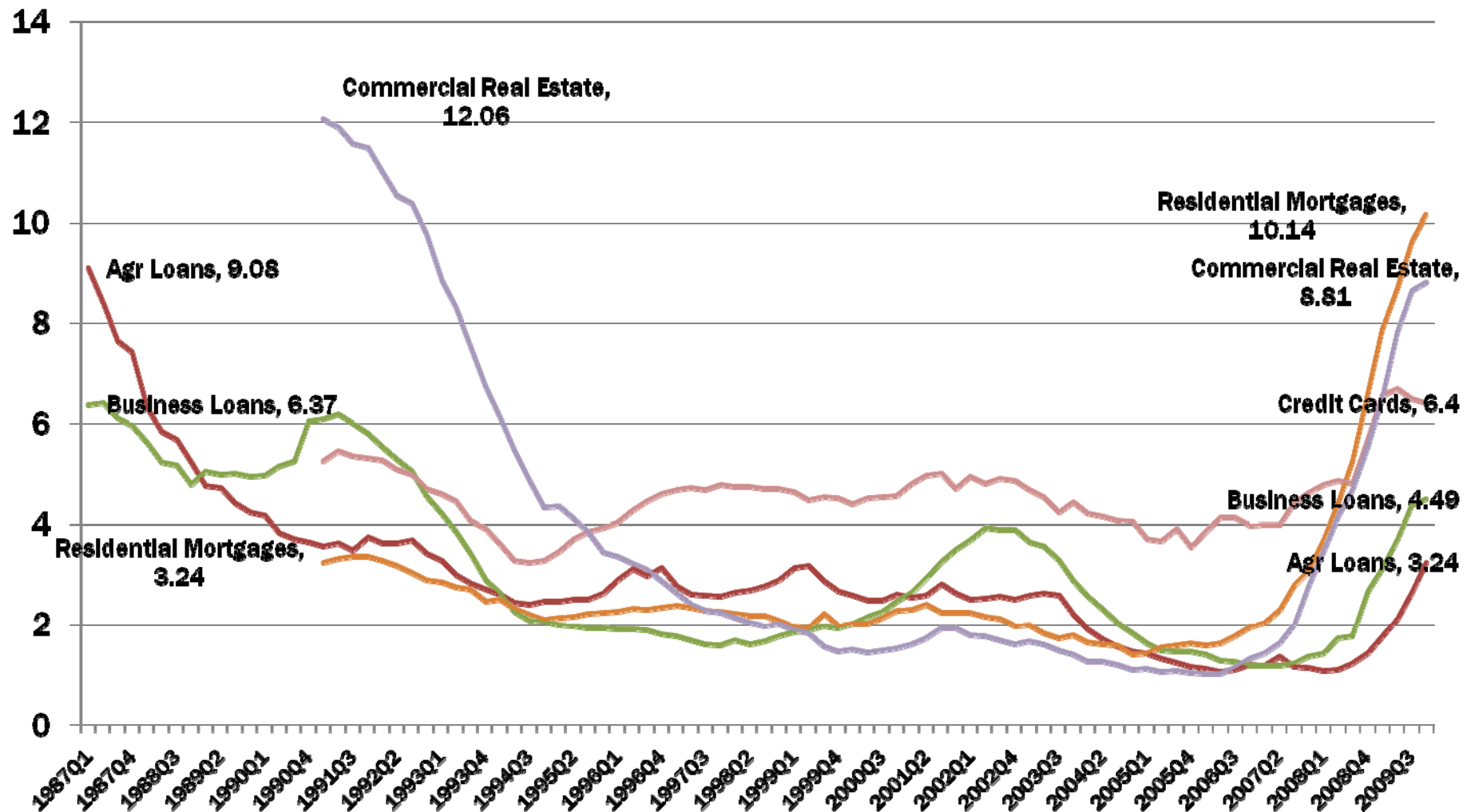
		Loans Secured by RE	Production Loans	Total Ag Loans
1	Wells Fargo Bank, NA	\$ 2,597,000	\$ 5,972,000	\$ 8,569,000
2	Bank of America, NA	1,815,530	1,511,970	3,327,500
3	Bank of the West	987,753	1,978,060	2,965,813
4	Rabobank, NA	1,527,271	562,229	2,089,500
5	U.S. Bank NA	744,309	1,042,911	1,787,220
6	M&I Marshall and Ilsley Bank	761,496	450,166	1,211,662
7	Regions Bank	733,065	303,174	1,036,239
8	Wachovia Bank, NA	378,000	448,000	826,000
9	Citibank, NA	16,000	799,000	815,000
10	KeyBank NA	214,206	529,294	743,500
11	Great Western Bank	285,153	442,300	727,453
12	First National Bank of Omaha	69,907	649,497	719,404
13	Citizens Business Bank	204,298	424,653	628,951
14	Pinnacle Bank	213,531	322,075	535,606
15	Fulton Bank, NA	399,579	135,466	535,045
		\$ 10,947,098	\$ 15,570,795	\$ 26,517,893
	Proportion of all banks	16%	26%	21%

Delinquency Rates

Commercial Banks



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Banks Initially Participating in TARP

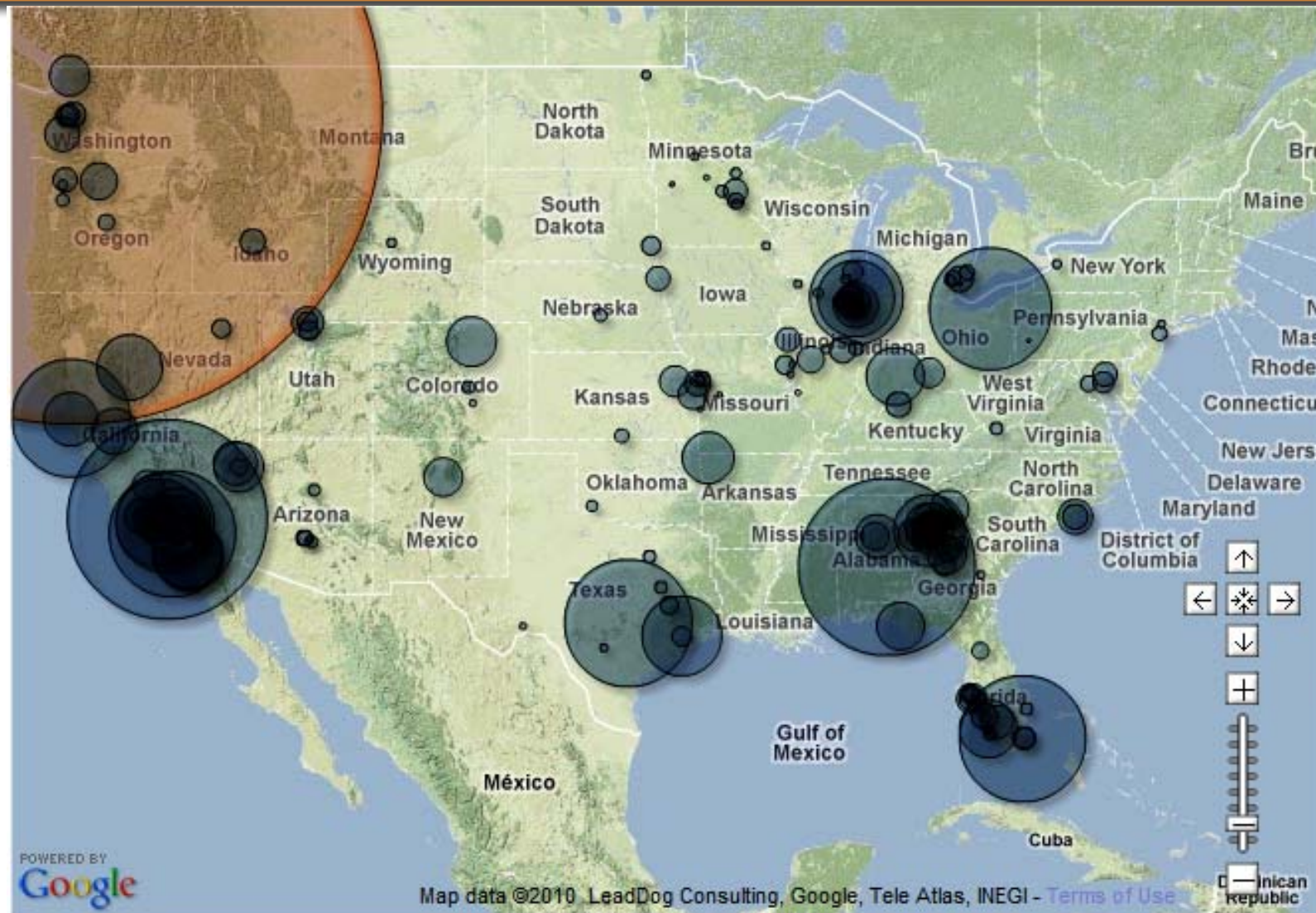


- 400 Firms (530 Banks)
- 6% of banks lending to Agriculture
- 24% of Agricultural Volume
- 0.09% ROA TARP Banks
- 0.42% ROA NonTARP Banks

185 Bank Failures Since 1/2008



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162 Bank Failures: 2009-present



	Secured by Farm Real Estate	Ag Production	Total Ag Loans
--	-----------------------------------	------------------	-------------------

Ag Loan Volume (\$ billion) \$	1.30 \$	0.89 \$	2.19
Number of banks with volume	103	60	106
Percent of total bank volume	1.06%	1.51%	1.20%

Agricultural Banks



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	2007	2008	2009
Return on assets	1.20%	1.00%	0.83%
Core Capital/Total Assets	10.31%	9.99%	9.96%
Percent all loans noncurrent	1.05%	1.43%	1.83%

Summary: Commercial Banks Lending to Agr.



- 702 on FDIC problem list
- Availability of credit
- Unemployment impacts
- Construction and Development Loans
- Community Banks
 - Less benefit from maturity spreads
 - Interest rate risk exposure
 - FDIC premium costs
 - Additional provisions

- Bond markets have stabilized
- \$2.850 Billion Income 2009
- Capital / Assets grew to 13.9%
- Nonaccrual loans increase \$1.087 billion
2.14% from 1.50%
- Exposure to dairy, protein and ethanol

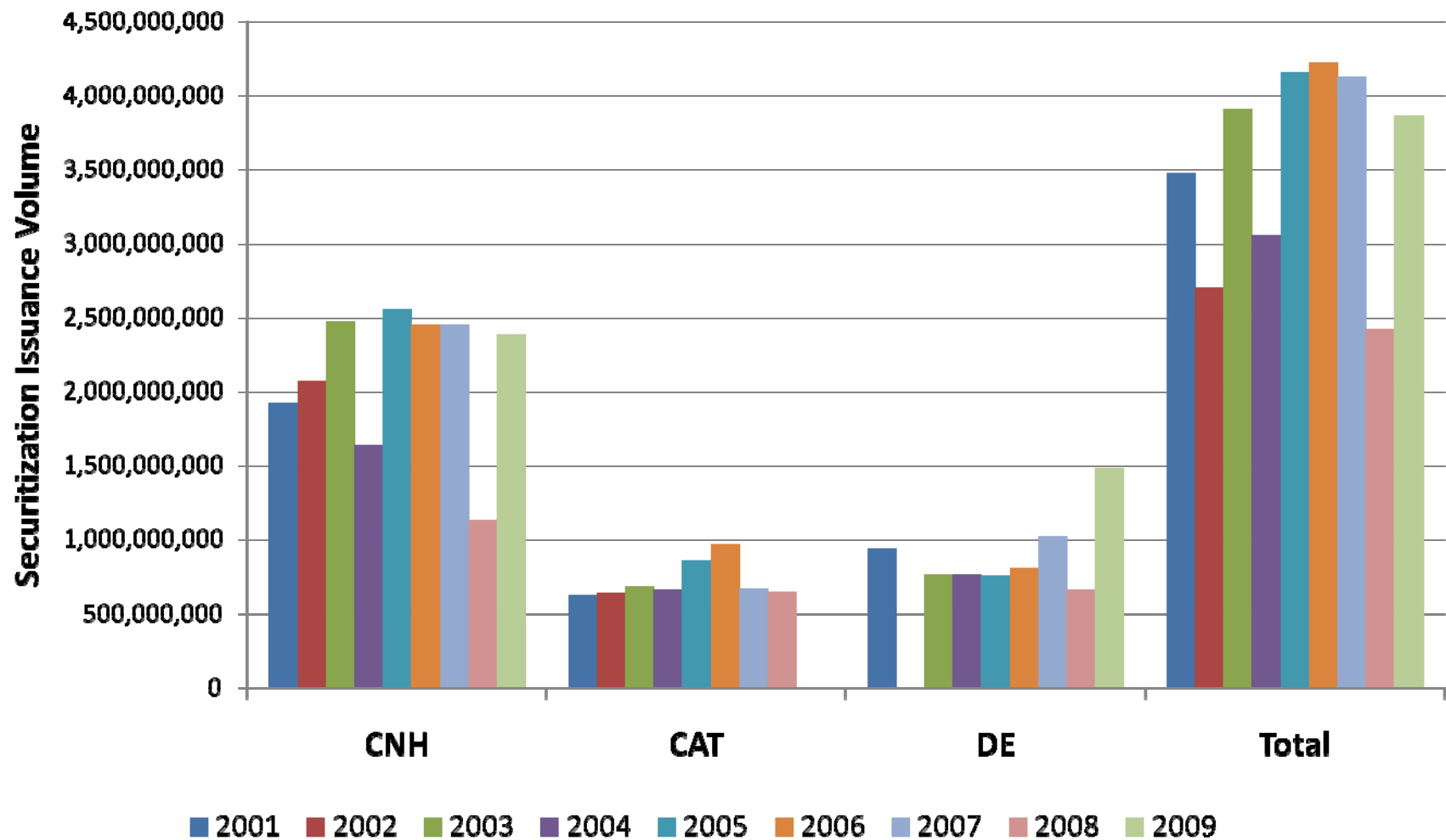
- Repay 2008 emergency capital infusion
- Capital surplus \$126 million Q3 - 2009
Up \$100 million
- Currently has largest capital surplus in history
- Ethanol losses and exposure
- Benefits from expanded authorities of rural utilities

Captive Finance

Securitization rebound



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- In general, health lenders to agriculture remains adequate
- Nonagricultural income and unemployment large issue
- Profit margins narrowing and risks increasing
More winners – more losers

Challenges: *Producer Risk Pipeline*



- **Commodity price risks**
- **Input price risks**
- **Cash rent**
- **Interest rate risks**
- **Counterparty risks**



Pushed back to producer