Overviews of US Agriculture

Primary source: 2007 Census of Agriculture
National Agricultural Statistics Service
Ag Atlas Maps
Population growth was fastest in metro counties; slowest in non-adjacent counties

<table>
<thead>
<tr>
<th>RUCC03</th>
<th>DESCRIPTION</th>
<th>COUNTIES</th>
<th>POP1990</th>
<th>POP2000</th>
<th>POP2010</th>
<th>CHG9010</th>
<th>CHG0010</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>metro areas of 1 million population or more</td>
<td>300</td>
<td>119,111,217</td>
<td>135,334,973</td>
<td>148,471,968</td>
<td>13.6%</td>
<td>9.7%</td>
</tr>
<tr>
<td>2</td>
<td>metro areas of 250,000 to 1 million</td>
<td>331</td>
<td>58,619,547</td>
<td>67,334,827</td>
<td>75,959,049</td>
<td>14.9%</td>
<td>12.8%</td>
</tr>
<tr>
<td>3</td>
<td>metro areas of fewer than 250,000</td>
<td>206</td>
<td>20,081,207</td>
<td>22,592,780</td>
<td>25,014,894</td>
<td>12.5%</td>
<td>10.7%</td>
</tr>
<tr>
<td>4</td>
<td>metro-adjacent, Urban population of 20,000 or more</td>
<td>138</td>
<td>9,504,011</td>
<td>10,501,927</td>
<td>11,258,878</td>
<td>10.5%</td>
<td>7.2%</td>
</tr>
<tr>
<td>5</td>
<td>non-adjacent, Urban population of 20,000 or more</td>
<td>115</td>
<td>6,497,800</td>
<td>7,144,271</td>
<td>7,787,607</td>
<td>9.9%</td>
<td>9.0%</td>
</tr>
<tr>
<td>6</td>
<td>metro-adjacent, Urban population of 2,500 to 19,999</td>
<td>613</td>
<td>16,048,348</td>
<td>18,057,920</td>
<td>19,227,111</td>
<td>12.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>7</td>
<td>non-adjacent, Urban population of 2,500 to 19,999</td>
<td>655</td>
<td>12,782,607</td>
<td>13,759,685</td>
<td>14,156,156</td>
<td>7.6%</td>
<td>2.9%</td>
</tr>
<tr>
<td>8</td>
<td>metro-adjacent, rural</td>
<td>248</td>
<td>2,503,478</td>
<td>2,892,066</td>
<td>3,054,438</td>
<td>15.5%</td>
<td>5.6%</td>
</tr>
<tr>
<td>9</td>
<td>non-adjacent, rural</td>
<td>537</td>
<td>3,532,355</td>
<td>3,780,201</td>
<td>3,815,437</td>
<td>7.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3143</td>
<td>248,680,570</td>
<td>281,398,650</td>
<td>308,745,538</td>
<td>13.2%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>
Gini coefficient = \( \frac{A}{A+B} \)

= (area between 45-degree line and Lorenz curve) / (area under 45-degree line)
Income inequality in the US has been increasing for decades. The *after-tax* Gini for the US is the 4th highest of all 34 OECD countries.
Median Age, by County (2010 Census)
### States Ranked by 2010 Per-Capita Representation in Congress
(voting House seats plus Senate seats)

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Population</th>
<th>Seats</th>
<th>Seats per Million</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wyoming</td>
<td>568,300</td>
<td>3</td>
<td>5.28</td>
<td>3.05</td>
</tr>
<tr>
<td>2</td>
<td>Vermont</td>
<td>630,337</td>
<td>3</td>
<td>4.76</td>
<td>2.75</td>
</tr>
<tr>
<td>3</td>
<td>North Dakota</td>
<td>675,905</td>
<td>3</td>
<td>4.44</td>
<td>2.57</td>
</tr>
<tr>
<td>4</td>
<td>Alaska</td>
<td>721,523</td>
<td>3</td>
<td>4.16</td>
<td>2.40</td>
</tr>
<tr>
<td>5</td>
<td>Rhode Island</td>
<td>1,055,247</td>
<td>4</td>
<td>3.79</td>
<td>2.19</td>
</tr>
<tr>
<td>6</td>
<td>South Dakota</td>
<td>819,761</td>
<td>3</td>
<td>3.66</td>
<td>2.11</td>
</tr>
<tr>
<td>7</td>
<td>Delaware</td>
<td>900,877</td>
<td>3</td>
<td>3.33</td>
<td>1.92</td>
</tr>
<tr>
<td>8</td>
<td>New Hampshire</td>
<td>1,321,445</td>
<td>4</td>
<td>3.03</td>
<td>1.75</td>
</tr>
<tr>
<td>9</td>
<td>Montana</td>
<td>994,416</td>
<td>3</td>
<td>3.02</td>
<td>1.74</td>
</tr>
<tr>
<td>10</td>
<td>Maine</td>
<td>1,333,074</td>
<td>4</td>
<td>3.00</td>
<td>1.73</td>
</tr>
<tr>
<td></td>
<td><strong>US TOTAL</strong></td>
<td><strong>309,183,463</strong></td>
<td><strong>535</strong></td>
<td><strong>1.73</strong></td>
<td><strong>1.00</strong></td>
</tr>
<tr>
<td>40</td>
<td>Virginia</td>
<td>8,037,736</td>
<td>13</td>
<td>1.62</td>
<td>0.93</td>
</tr>
<tr>
<td>41</td>
<td>Michigan</td>
<td>9,911,626</td>
<td>16</td>
<td>1.61</td>
<td>0.93</td>
</tr>
<tr>
<td>42</td>
<td>New Jersey</td>
<td>8,807,501</td>
<td>14</td>
<td>1.59</td>
<td>0.92</td>
</tr>
<tr>
<td>43</td>
<td>Pennsylvania</td>
<td>12,734,905</td>
<td>20</td>
<td>1.57</td>
<td>0.91</td>
</tr>
<tr>
<td>44</td>
<td>North Carolina</td>
<td>9,565,781</td>
<td>15</td>
<td>1.57</td>
<td>0.91</td>
</tr>
<tr>
<td>45</td>
<td>Ohio</td>
<td>11,568,495</td>
<td>18</td>
<td>1.56</td>
<td>0.90</td>
</tr>
<tr>
<td>46</td>
<td>Illinois</td>
<td>12,864,380</td>
<td>20</td>
<td>1.55</td>
<td>0.90</td>
</tr>
<tr>
<td>47</td>
<td>Florida</td>
<td>18,900,773</td>
<td>29</td>
<td>1.53</td>
<td>0.89</td>
</tr>
<tr>
<td>48</td>
<td>Texas</td>
<td>25,268,418</td>
<td>38</td>
<td>1.50</td>
<td>0.87</td>
</tr>
<tr>
<td>49</td>
<td>New York</td>
<td>19,421,055</td>
<td>29</td>
<td>1.49</td>
<td>0.86</td>
</tr>
<tr>
<td>50</td>
<td>California</td>
<td>37,341,989</td>
<td>55</td>
<td>1.47</td>
<td>0.85</td>
</tr>
<tr>
<td>51</td>
<td>District of Columbia</td>
<td>601,723</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
2008 and 2012 Voting Results vs. Population Growth

US Counties classified by RUCC2003

<table>
<thead>
<tr>
<th>RUCC03</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>metro areas of 1 million population or more</td>
</tr>
<tr>
<td>2</td>
<td>metro areas of 250,000 to 1 million</td>
</tr>
<tr>
<td>3</td>
<td>metro areas of fewer than 250,000</td>
</tr>
<tr>
<td>4</td>
<td>metro-adjacent, Urban population of 20,000 or more</td>
</tr>
<tr>
<td>5</td>
<td>non-adjacent, Urban population of 20,000 or more</td>
</tr>
<tr>
<td>6</td>
<td>metro-adjacent, Urban population of 2,500 to 19,999</td>
</tr>
<tr>
<td>7</td>
<td>non-adjacent, Urban population of 2,500 to 19,999</td>
</tr>
<tr>
<td>8</td>
<td>metro-adjacent, rural</td>
</tr>
<tr>
<td>9</td>
<td>non-adjacent, rural</td>
</tr>
</tbody>
</table>

Population Growth, 2000-2010

In(Democrat/Republican)
Federal spending redistributes blue state taxes to red states

Winners vs. Losers, 2005

McCain vs. Obama, 2008


ACTUAL ELECTION RESULTS

<table>
<thead>
<tr>
<th></th>
<th>LOSER</th>
<th>WINNER</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCain</td>
<td>1</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Obama</td>
<td>17</td>
<td>11</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>32</td>
<td>50</td>
</tr>
</tbody>
</table>

EXPECTED RESULTS UNDER NULL HYPOTHESIS

<table>
<thead>
<tr>
<th></th>
<th>LOSER</th>
<th>WINNER</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCain</td>
<td>8</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Obama</td>
<td>10</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>32</td>
<td>50</td>
</tr>
</tbody>
</table>

Chi-square = 17.247
p = 0.00003282
Change in Number of Farms with 180 to 499 Acres: 2002 to 2007

1 Dot = 10 Farms Increase
1 Dot = 10 Farms Decrease

United States Net Decrease -20,249
Change in Number of Farms with 500 to 1,999 Acres: 2002 to 2007

1 Dot = 10 Farms Increase
1 Dot = 10 Farms Decrease

United States Net Decrease -18,203

U.S. Department of Agriculture, National Agricultural Statistics Service
Change in Number of Farms with 2,000 Acres or More: 2002 to 2007

1 Dot = 10 Farms Increase
1 Dot = 10 Farms Decrease

United States Net Increase +2,423
Percent of Principal Farm Operators Reporting Primary Occupation as Farming: 2007

Map showing the distribution of farm operators across the United States in 2007, with varying shades indicating the percentage of operators reporting farming as their primary occupation.
Percent of Principal Farm Operators Not Residing on Farm Operated: 2007

Map showing the percent distribution of farm operators not residing on their farm for the United States, with a legend indicating different color-coded ranges for the percent values.
Hired Farm Workers Working Less Than 150 Days: 2007

1 Dot = 250 Hired Farm Workers

United States Total
1,725,070
Percent of Farms with Sales of Less Than $10,000: 2007
Average Value of Agricultural Products Sold per Farm: 2007

Dollars
- Less than 10,000
- 10,000 - 99,999
- 100,000 - 249,999
- 250,000 - 499,999
- 500,000 or more

United States Average: $134,807
Sunflower Seed (Oil Varieties), Harvested Acres: 2007

1 Dot = 1,000 Acres

United States Total
1,710,057
Potatoes, Excluding Sweet Potatoes, Harvested Acres: 2007

1 Dot = 1,000 Acres

United States Total 1,131,963

U.S. Department of Agriculture, National Agricultural Statistics Service
Number of Farms with 200 or More Cattle and Calves: 2007

United States Total: 88,758

1 Dot = 10 Farms

U.S. Department of Agriculture, National Agricultural Statistics Service
Beef Cows - Change in Inventory: 2002 to 2007

1 Dot = 500 Beef Cows Increase
1 Dot = 500 Beef Cows Decrease

United States Net Decrease
-563,470
Hogs and Pigs - Change in Inventory: 2002 to 2007

1 Dot = 5,000 Hogs and Pigs Increase
1 Dot = 5,000 Hogs and Pigs Decrease

United States Net Increase
+7,381,215
Sheep and Lambs - Change in Inventory: 2002 to 2007

1 Dot = 250 Sheep and Lambs Increase
1 Dot = 250 Sheep and Lambs Decrease

United States Net Decrease
-522,637
Value of Cotton and Cottonseed Sold as Percent of Total Market Value of Agricultural Products Sold: 2007

- Percent:
  - Less than 1
  - 1 - 9
  - 10 - 24
  - 25 - 49
  - 50 or more

United States 1.6 Percent

U.S. Department of Agriculture, National Agricultural Statistics Service

Percent
Less than 1
1 - 4
5 - 9
10 - 24
25 or more

United States
4.9 Percent

U.S. Department of Agriculture, National Agricultural Statistics Service
Value of Fruits, Tree Nuts, and Berries Sold as Percent of Total Market Value of Agricultural Products Sold: 2007

Percent

- Less than 1
- 1 - 9
- 10 - 19
- 20 - 29
- 30 or more
Value of Livestock, Poultry, and Their Products Sold: 2007

1 Dot = $10,000,000

United States Total
$153,562,563,000
Value of Livestock, Poultry, and Their Products Sold as Percent of Total Market Value of Agricultural Products Sold: 2007

Percent:
- Less than 20
- 20 - 34
- 35 - 49
- 50 - 64
- 65 - 84
- 85 or more

United States 51.7 Percent

U.S. Department of Agriculture, National Agricultural Statistics Service
Value of Milk and Other Dairy Products from Cows Sold as Percent of Total Market Value of Agricultural Products Sold: 2007

United States
10.7 Percent

Percent
Less than 1
1 - 4
5 - 14
15 - 29
30 - 49
50 or more

0 200 Miles
0 100 Miles

0 100

U.S. Department of Agriculture, National Agricultural Statistics Service
Value of Cattle and Calves Sold as Percent of Total Market Value of Agricultural Products Sold: 2007
Value of Hogs and Pigs Sold as Percent of Total Market Value of Agricultural Products Sold: 2007

Percent
Less than 1
1 - 4
5 - 9
10 - 19
20 - 29
30 or more

United States 6.1 Percent
Value of Agricultural Products Sold Directly to Individuals for Human Consumption: 2007

1 Dot = $150,000

United States Total
$1,211,270,000

U.S. Department of Agriculture, National Agricultural Statistics Service
Average Value per Farm of Agricultural Products Sold Directly to Individuals for Human Consumption: 2007

Dollars
- Less than 2,500
- 2,500 - 4,999
- 5,000 - 9,999
- 10,000 - 24,999
- 25,000 - 49,999
- 50,000 or more

United States Average
$8,853

Percent
- Less than 10
- 10 - 19
- 20 - 29
- 30 - 54
- 55 - 74
- 75 or more

United States
38.0 Percent

Source: U.S. Department of Agriculture, National Agricultural Statistics Service
Payments Received from Conservation Reserve, Wetlands Reserve, Farmable Wetlands and Conservation Reserve Reserve Enhancement Programs: 2007
Payments Received from Conservation Reserve, Wetlands Reserve, Farmable Wetlands and Conservation Reserve Reserve Enhancement Programs, Average per Farm: 2007

United States Average
$5,072

Dollars
- Less than 1,000
- 1,000 - 2,999
- 3,000 - 6,999
- 7,000 - 14,999
- 15,000 - 29,999
- 30,000 or more
Payments Received from Other Federal Farm Programs,
Average per Farm: 2007

Dollars
- Less than 2,500
- 2,500 - 4,999
- 5,000 - 9,999
- 10,000 - 14,999
- 15,000 - 24,999
- 25,000 or more

United States Average
$9,059

Source:
U.S. Department of Agriculture, National Agricultural Statistics Service
Total Amount Received from Government Commodity Credit Corporation Loans: 2007

1 Dot = $750,000

United States Total $4,445,758,000

0 100 Miles

U.S. Department of Agriculture, National Agricultural Statistics Service
Total Amount Received from Government Commodity Credit Corporation Loans, Average per Farm: 2007

United States Average $87,909
Total Income from Farm-Related Sources, Gross before Taxes and Expenses: 2007

1 Dot = $750,000

United States Total $10,489,874,000
Total Income from Farm-Related Sources, Gross before Taxes and Expenses, Average per Farm: 2007

Dollars

- Less than 5,000
- 5,000 - 9,999
- 10,000 - 19,999
- 20,000 - 29,999
- 30,000 - 59,999
- 60,000 or more

United States Average

$15,133
Average Total Farm Production Expenses per Farm: 2007

United States Average
$109,359
Expenses for Fertilizer, Lime, and Soil Conditioners as Percent of Total Farm Production Expenses: 2007

Percent
- Less than 2
- 2 - 3
- 4 - 5
- 6 - 7
- 8 - 11
- 12 or more

United States
7.5 Percent

U.S. Department of Agriculture, National Agricultural Statistics Service
Expenses for Gasoline, Fuels, and Oils as Percent of Total Farm Production Expenses: 2007

United States 5.4 Percent

Percent
Less than 4
4 - 5
6 - 7
8 - 9
10 - 11
12 or more

0 200 Miles

0 100 Miles

07-M062
U.S. Department of Agriculture, National Agricultural Statistics Service
Expenses for Hired Farm Labor as Percent of Total Farm Production Expenses: 2007

Map showing the distribution of expenses for hired farm labor across the United States, with color coding indicating the percent of total farm production expenses attributed to hired labor. The map highlights various regions with different percentages, with darker colors indicating higher percentages.
Expenses for Contract Labor as Percent of Total Farm Production Expenses: 2007

United States 1.9 Percent

Legend:
- Less than 1
- 1 - 2
- 3 - 5
- 6 - 9
- 10 or more

Source: U.S. Department of Agriculture, National Agricultural Statistics Service
Expenses for Interest Paid on Debts as Percent of Total Farm Production Expenses: 2007
Average farm real estate values, 1980-2010

$ per acre

Source: USDA, National Agricultural Statistics Service.
Average farmland value by land use and region, as of 2007 (in 2005 $)

$ per acre

- Cropland
- Pastureland

Source: USDA, ERS analysis of National Agricultural Statistics Service June Area Survey data.
Land values and farm sector net income, 1980-2009 (in 2005 $)

Net farm income ($ per acre)

Land value ($ per acre)

Cropland rent-to-value, 1967-2011

Percent

Sources: For 1997-2011, USDA-NASS Quickstats (http://quickstats.nass.usda.gov/). For earlier data, see USDA-ERS cash rent and Agricultural Land Values Survey data.

Trends in U.S. Farmland Values and Ownership / EIB-92
Economic Research Service/USDA
County average rent-to-value ratios\(^1\), 1999-2008

Note: The nonshaded areas either did not have any farms included in the JAS or had insufficient observations due to low levels of agricultural production.

Source: USDA, ERS analysis of National Agricultural Statistics Service June Area Survey data.
The orange and green dotted lines represent the average cropland price divided by the capitalized value under different assumptions about interest rates. When this ratio is equal to or less than 1, cropland prices are supported by fundamental farm factors.

2011 forecast.

1Ratios are calculated as the average cropland value per acre divided by the capitalized values. Capitalized value = per-acre cropland cash rent / interest rate on 10-year note. The dotted line represents the same ratio, with capitalized value calculated using a constant 6% interest rate.

Sources: USDA, ERS analysis of National Agricultural Statistics Service farmland value and rent data.
Returns to farm real estate versus stocks and gold, 1970-2008

Sources: Farmland returns are derived from the USDA, National Agricultural Statistics Service June Area Survey estimates of average value per acre of all farms and buildings in the continental United States. The S&P 500 and gold prices are based on end-of-year settlement prices.
Returns to farm real estate versus stocks and bonds, 1990-2008

Sources: Farmland returns are derived from the USDA, National Agricultural Statistics Service June Area Survey estimates of average value per acre of all farms and buildings in the continental United States. The S&P 500 and gold prices are based on end-of-year settlement prices.
Spatial distribution of grain elevators, 2002


Trends in U.S. Farmland Values and Ownership / EIB-92
Economic Research Service/USDA
Cropland values by amount of selected government payments, 2007

Cropland value per acre ($)

- DCP Payments
- Crop Insurance Premium Subsidy

Program payment per acre

- $1-5
- $5-10
- $10-15
- $15-20
- >$20

DCP = Direct and countercyclical program payments.

Source: USDA, ERS analysis of National Agricultural Statistics Service June Area Survey data, Risk Management Agency and Farm Service Agency data, and Census of Agriculture data.
Ratio of selected government payments to cropland value\(^1\), 2006-08

Direct payments or premium subsidies ratio > 0.01
Direct payments ratio > 0.02
Premium subsidies ratio > 0.02
Premium subsidies and direct payments ratio > 0.02

\(^1\)Ratio of per acre cash direct payments and per acre crop insurance premium subsidies to per acre value of cropland in National Agricultural Statistics Service June Area Survey, including both irrigated and non-irrigated cropland.

Source: USDA, ERS analysis of National Agricultural Statistics Service June Area Survey data, Risk Management Agency and Farm Service Agency data, and Census of Agriculture data.
Farm real estate values by distance to population centers, 2008