

Federal Funds Allocation For Education Between 2005-2009

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Methodology

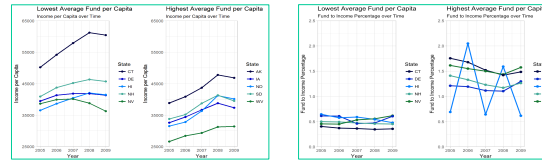
- **Data Source:** federal funds for all states from 2005 to 2009, socio-economic data, and agency information
- **Tools:** R Studio program with Hadley Wickham's packages reshape2, plyr, ggplot2
- **Data Processing:** linked the federal fund dataset and the agency dataset through their Catalog of Federal Domestic Assistance [CFDA] numbers as well as program titles
- **Limitation:** ~55% of funds were able to cross-reference a sector label

Key Variables

1. **Education Funds Per Capita** for comparison across states
2. **Average Income Per Capita** serves as an indicator for population welfare and wealth
3. **Fund to Income Percentage** helps answer the question "What level of benefits do states receive from federal funding?"

Average Income Per Capita/Fund to Income Percentage

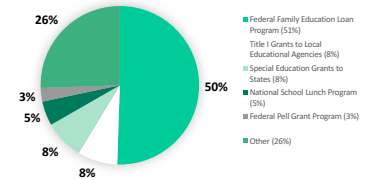
Negative Correlation between Education Funding and Welfare



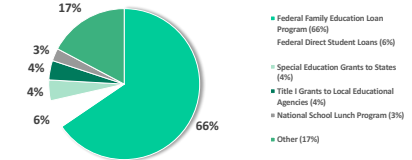
- States that receive the most funds have a lower level of social welfare on average, with the exception of Arkansas
- With the exception of Connecticut, the wealthier, high fund recipient states are observed to have less of an income increase between 2005 and 2008 than the lower-income states
- Hypothesis: government's goal of focus funding states below the national socio-economic average
- However, since social programs are known to respond slowly to government policy (especially if gauged by income), it may be difficult to attribute this increase to education funding with only this data

Influential Educational Funding Programs

Educational Funds for Low Recipients

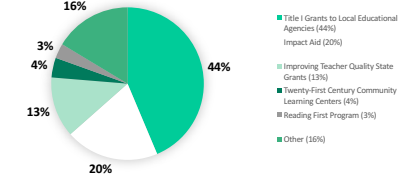


Educational Funds for High Recipients

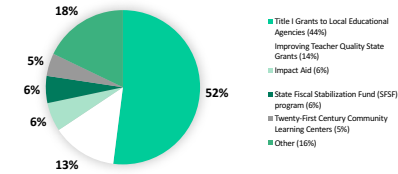


Stark Contrast in Pell Grants, Direct Student Loans, Impact Aid

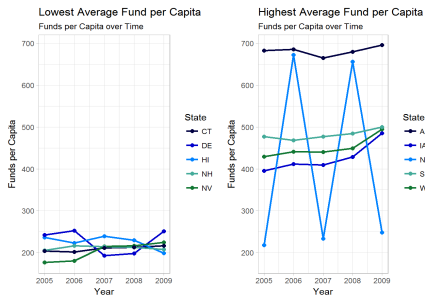
K-12 Funds for High Recipients



K-12 Funds for Low Recipients

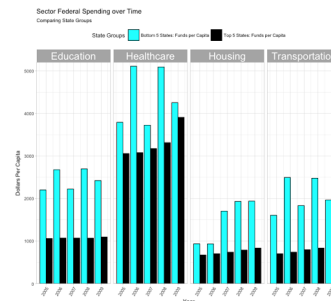


Funds Per Capita Story - Two Strongly Polarized Groups



- The states were selected by using the average funds per capita over the five years of data
- States that received the least funding per capita in an increasing order are: **Nevada, Connecticut, New Hampshire, Hawaii, and Delaware**
- The states who receive the most in descending order are: **Alaska, South Dakota, West Virginia, Iowa, North Dakota**
- The top per capita recipients acquire more than double the funds of the lower recipients

Sectors Analysis



- The states who are the highest recipient of funds have a more volatile pattern than the states with the least funds received
- Funding in wealthier states follow the pattern of nation-wide federal spending
- 2006 and 2008 stand out as years where funding across Education, Housing, and Healthcare were expanded
- Highest recipients of funds are undergoing a shift in strategies with the goal of stabilizing social welfare in the United States