

# State-Level Impacts of Government Aid Programs on the Supplemental Poverty Rate

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## Introduction

The Supplemental Poverty Measure (SPM) is an extension of the Official Poverty Measure (OPM) that accounts for governmental aid received in both cash and noncash form (Fox, 2018). Unlike the latter, the SPM accounts for key expenses families incur when measuring their poverty status. Consequentially, the SPM can reveal the most impactful additions and subtractions to a family’s resources.

## Objective

I will illustrate the state-level impacts of six of the most influential transfers and expenses considered by the SPM. Identifying these state level variations may help researchers and policymakers improve their understanding of what programs are most beneficial, including where those programs are having the greatest impact.

## Data

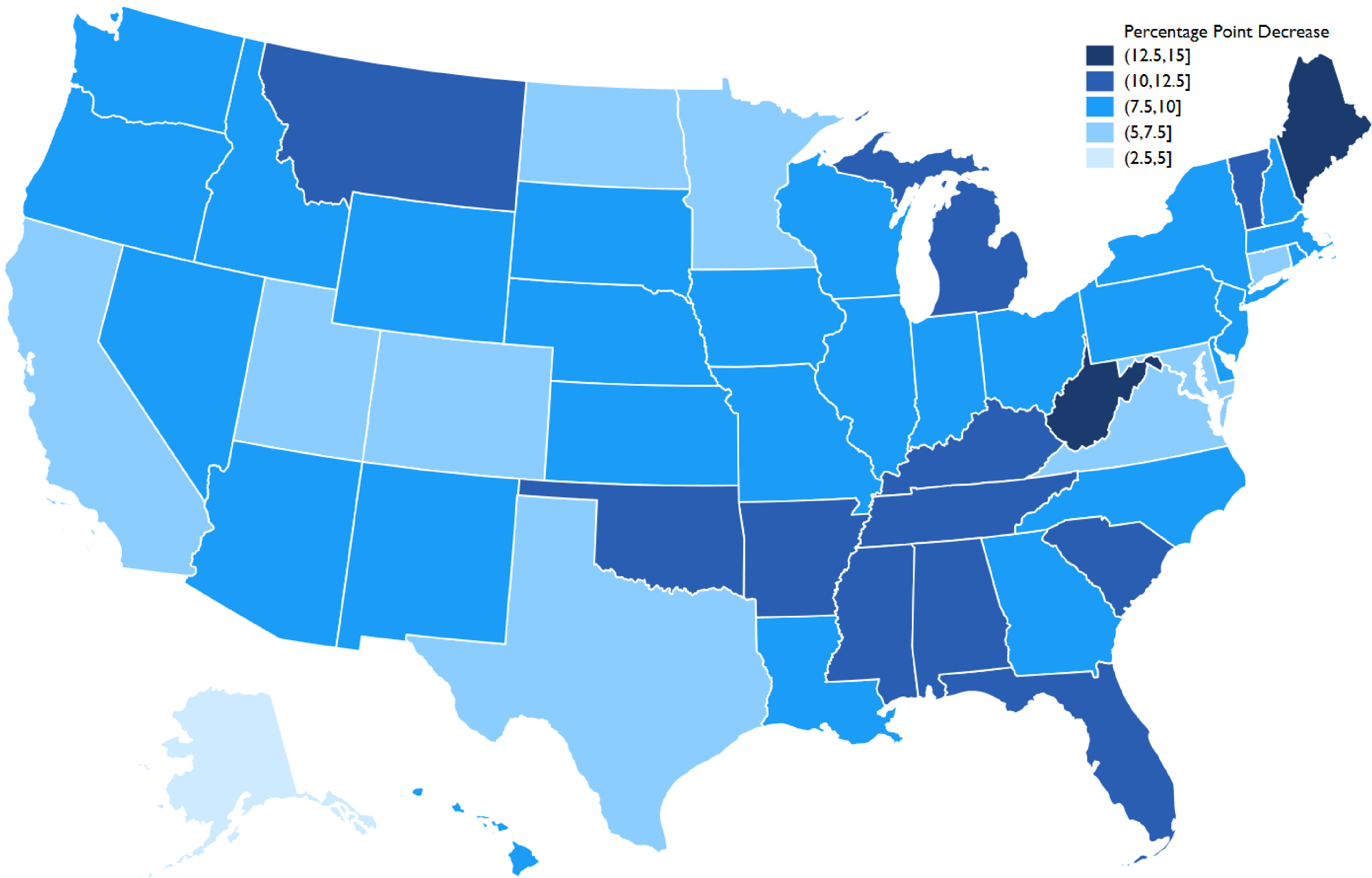
The SPM uses data collected by the Current Population Survey’s Annual Social and Economic Supplement (CPS-ASEC). Following Census Bureau recommendations, three years averages (2016 – 2018) are used for state level estimates. Note that the most recent CPS- ASEC was not used due to the survey’s redesign and new processing system in 2019.

## Method

To determine the impact a benefit or expense has on the SPM rate, a recalculated rate was subtracted from the original rate (as published in the official SPM Report). The recalculated rate excludes the corresponding benefit or expense when determining if an individual’s total resources were less than the poverty threshold.

Figures 1 – 4 illustrate the poverty alleviating effects of additions and transfers to family income. Figure 5 and 6 illustrate the strain of necessary expenses on family’s resources.

Figure 1. Impact of Social Security on the SPM: 2016 - 2018

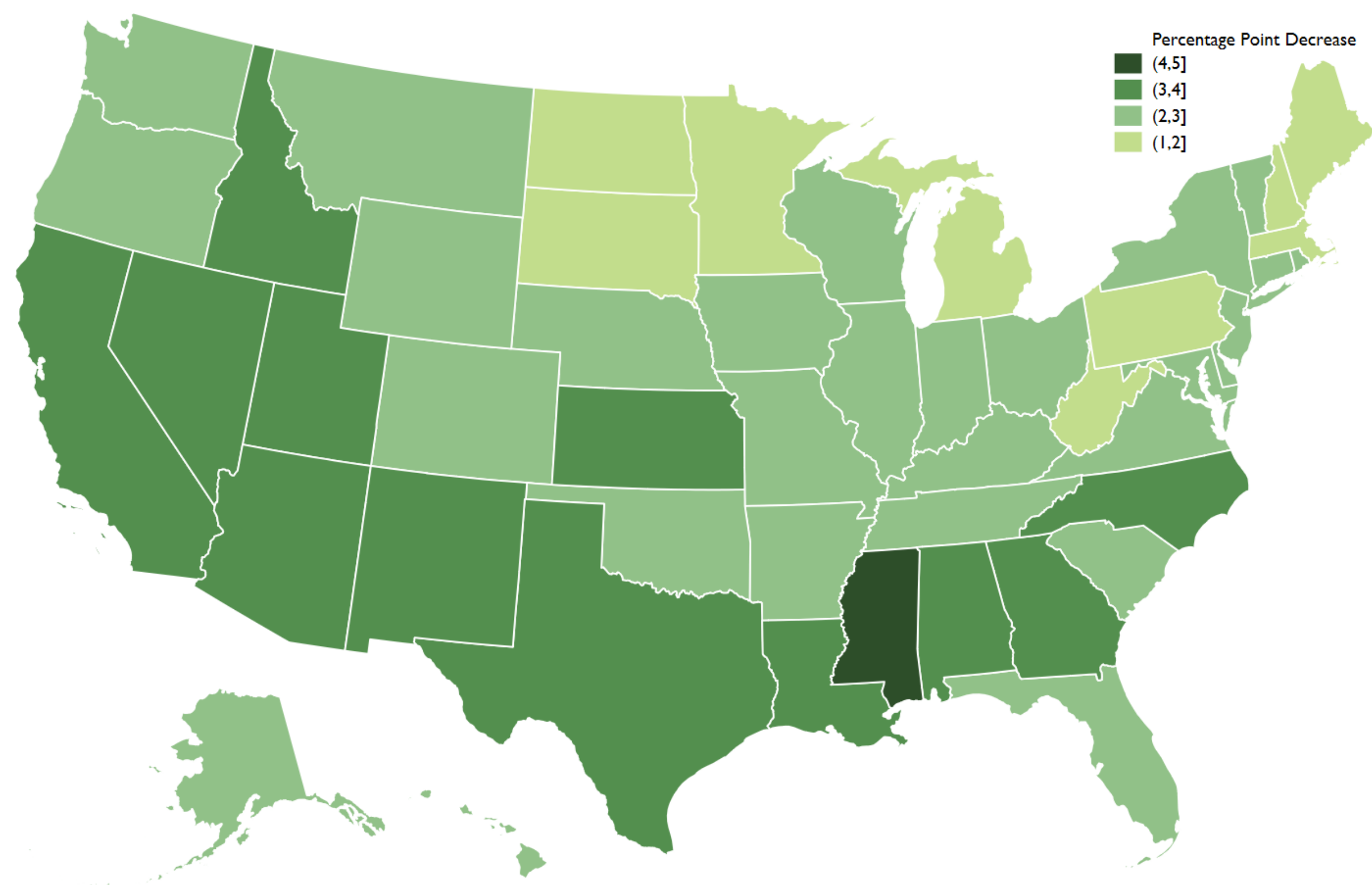


Note that the District of Columbia has an estimated decrease of 4.5 percentage points.

## References

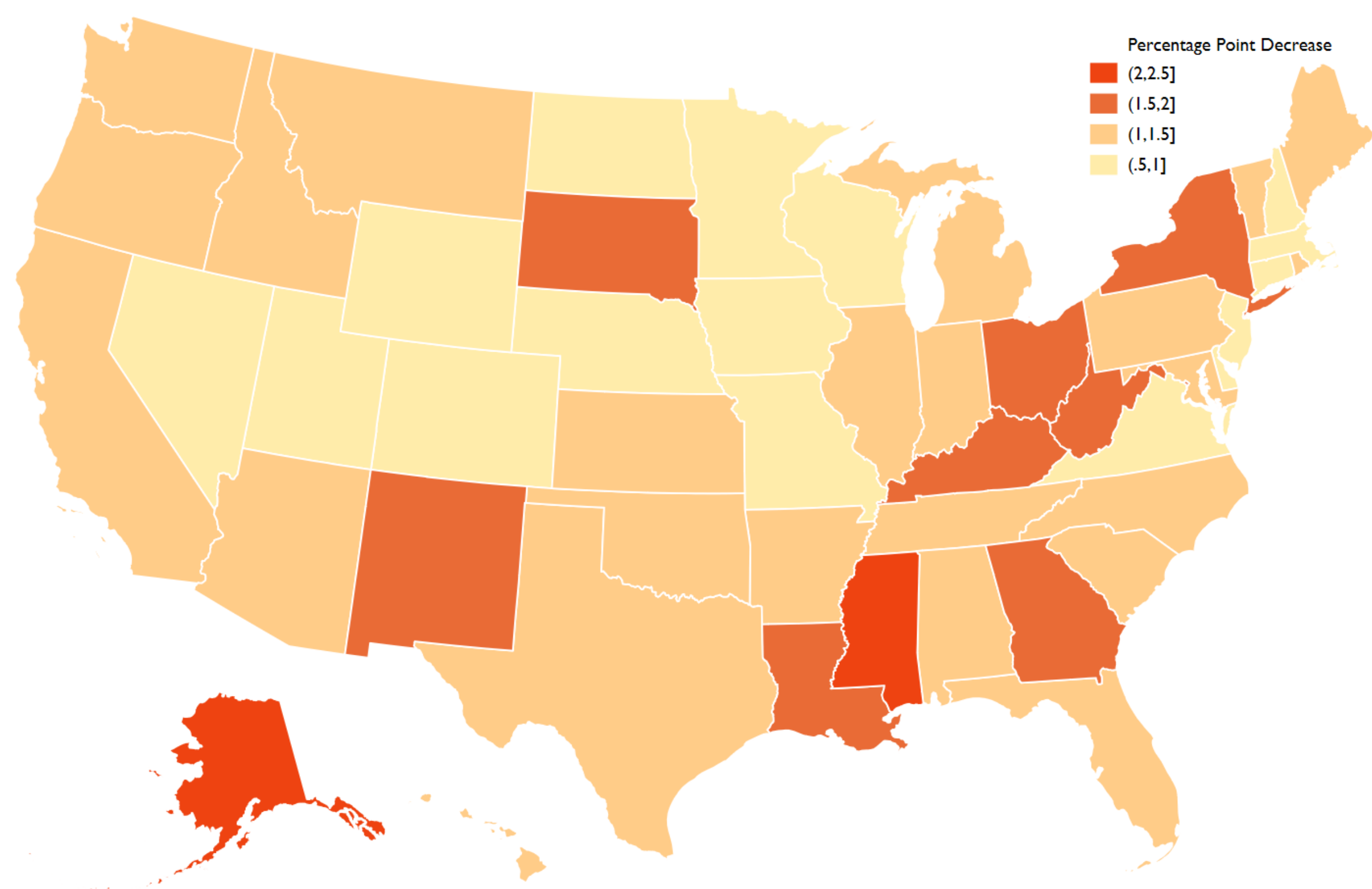
1. Fox L. (2018). The Supplemental Poverty Measure: 2017. U.S. Census Bureau. September.
2. Provencher A. (2011). Unit of Analysis for Poverty Measurement: A Comparison of the Supplemental Poverty Measure and the Official Poverty Measure. U.S. Census Bureau. March.
3. Current Population Survey, Annual Social and Economic Supplement (CPS-ASEC). U.S. Census Bureau. March 2016 – 2018

Figure 2. Impact of Refundable Tax Credits on the SPM: 2016 - 2018



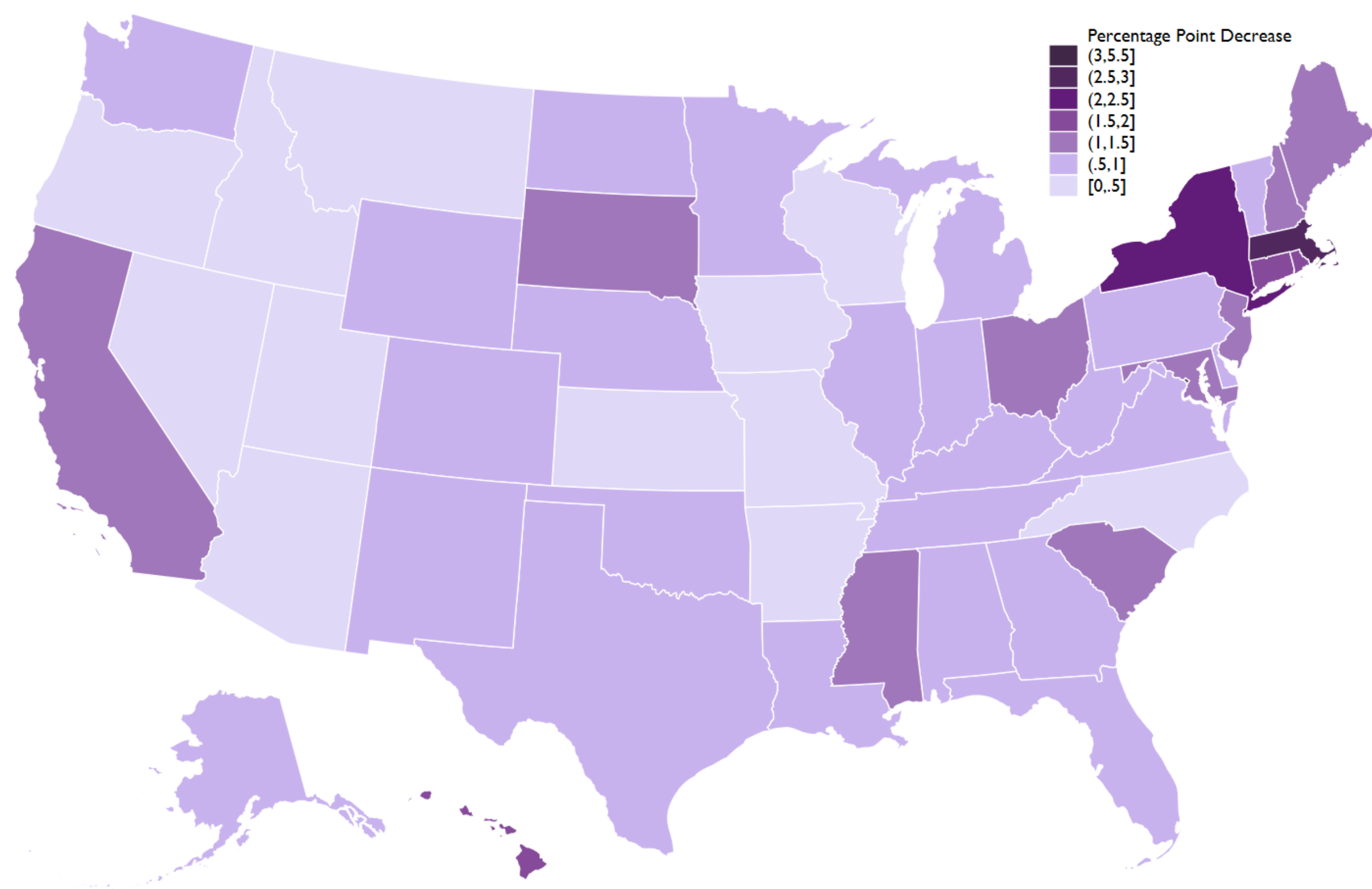
Note that the District of Columbia has an estimated decrease of 1.8 percentage points.

Figure 3. Impact of SNAP on the SPM: 2016 - 2018



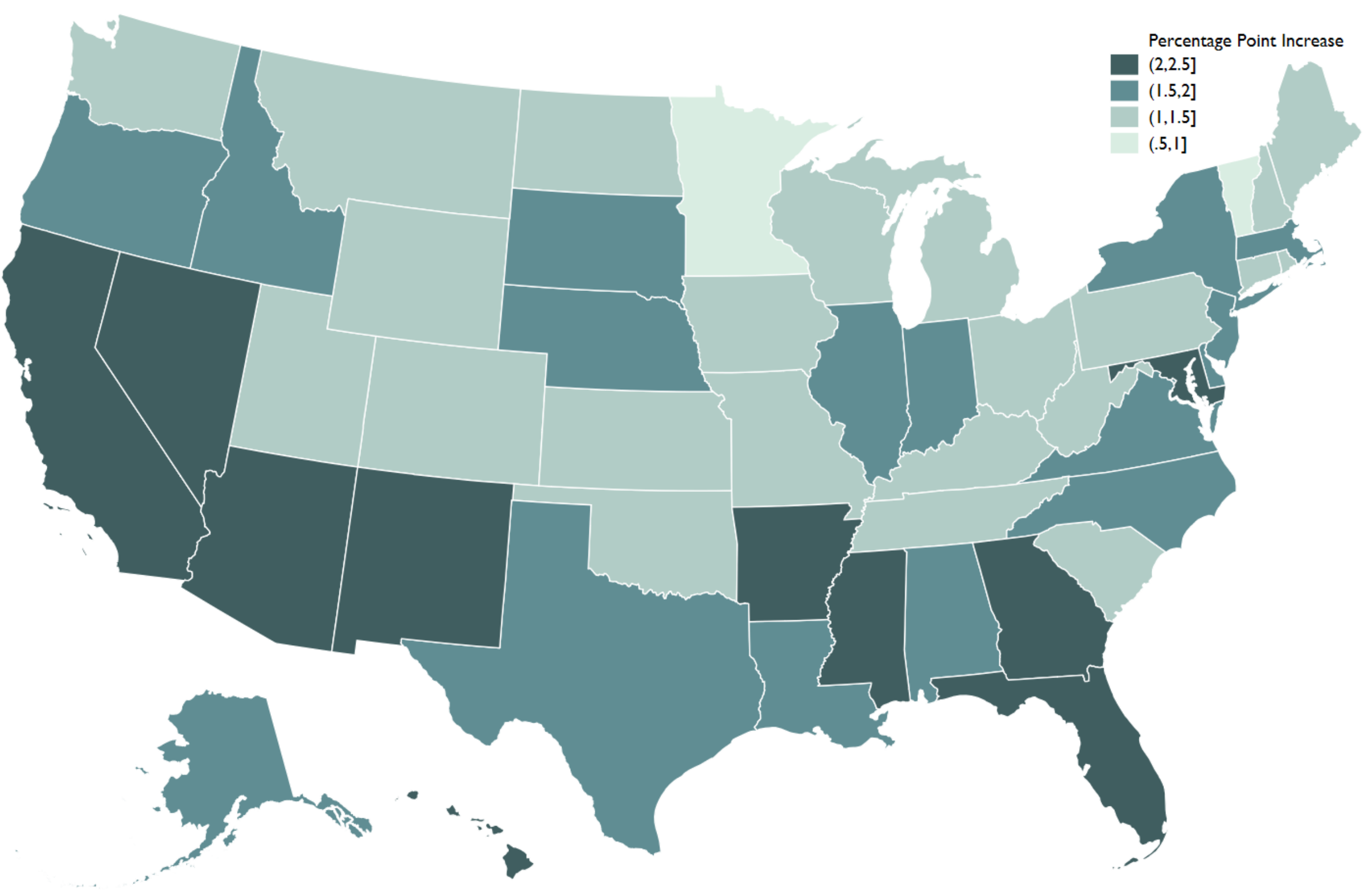
Note that the District of Columbia has an estimated decrease of 1.7 percentage points.

Figure 3. Impact of Housing Subsidies on the SPM: 2016 - 2018



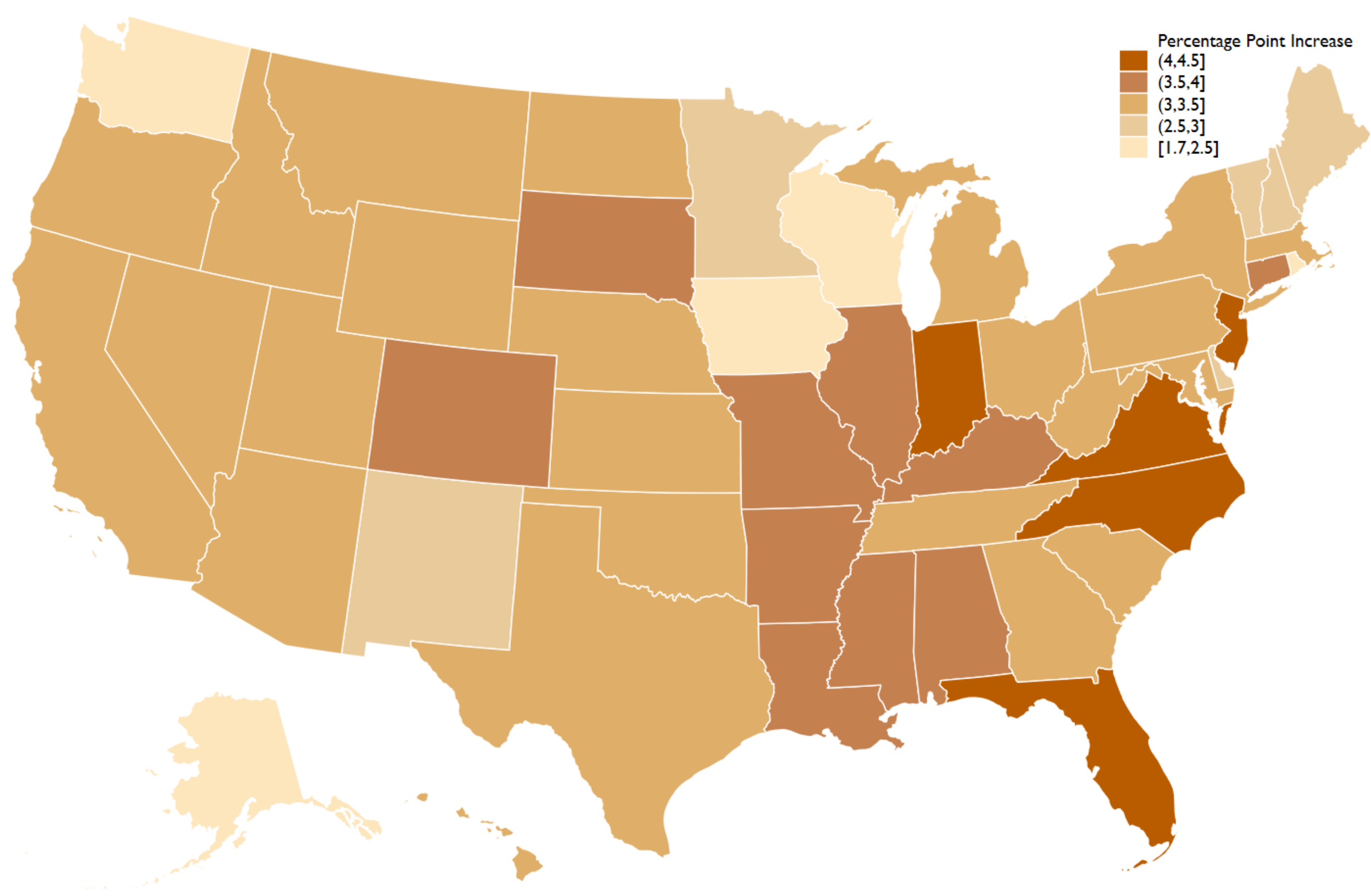
Note that the District of Columbia has an estimated decrease of 4.7 percentage points.

Figure 5. Impact of Work Expenses on the SPM: 2016 - 2018



Note that the District of Columbia has an estimated increase of 1.7 percentage points.

Figure 6. Impact of Medical Expenses on the SPM: 2016 - 2018



Note that the District of Columbia has an estimated increase of 2.7 percentage points.

## Conclusion

The SPM considers additional benefits that the OPM does not. Consequentially, researchers can estimate the impact that government aid programs and major expenses have on either decreasing or increasing the SPM rate. Knowing how each benefit or expense impacts smaller geographic regions is useful for understanding the distribution of welfare across the country. State level estimates on the poverty reducing impact of aid programs can also signal to policymakers their effectiveness and help pinpoint where additional aid may be needed.

I would like to sincerely thank Liana Fox at the U.S. Census Bureau for her guidance on this analysis.



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