

2023 ACS Data Users Conference

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# Using the ACS-Based ATTIS Model to Estimate How Much Policy Changes Can Reduce Child Poverty



The Income Support Team, Income and Benefits Policy Center

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# The Context

- Official (cash) measure of poverty, 5-year ACS data, 2017-2021:
  - All People **12.6%**
  - Children **17.0%**
- Many policy ideas are discussed to potentially reduce poverty –
  - New or modified policies for cash or in-kind benefits
  - New or modified tax or tax credit policies
- Policymakers need ways to help understand the potential impacts of different kinds of policies, *without actually implementing the policies*
  - How much could poverty be reduced?
  - Overall? By characteristics? In a particular state?

# Assessing Anti-Poverty Impacts With Survey Data

- Key requirements:
  - High-quality household surveys
  - The SPM poverty measure
  - A microsimulation model
- A recent example: NAS “Roadmap to Reducing Child Poverty” analysis
  - Used the TRIM3 microsimulation model, applied to CPS data
- Today’s focus:
  - An ACS-based microsimulation model: [ATTIS](#)

# Today's Discussion

- Key points on the ATTIS microsimulation model
- Examples of using ATTIS to analyze child poverty reduction from these policies:
  - Real-world COVID response policies
  - \$15/hour minimum wage
  - A package of proposed policies to reduce poverty in New York City
  - 100% participation and full funding across the social safety net, in Illinois
- Purpose:
  - Awareness of where the results come from if you see them
  - Ideas for your own research

# The ATTIS microsimulation model

- Operates on American Community Survey data – allowing state and substate analysis
- “Simulates” the operation of benefit and tax programs
  - Rules applied to families in the ACS, one at a time
  - Very detailed, state-level rules
  - Picks up interactions across programs
- System also includes:
  - Ability to “age” a survey data file to a year without a survey data file
  - Ability to impose labor supply impacts

# Programs Modeled in ATTIS

- Cash benefits:
  - Supplemental Security Income (SSI)
  - Temporary Assistance for Needy Families (TANF)
  - Unemployment compensation
- Nutrition benefits:
  - Supplemental Nutritional Assistance Program (SNAP; assessed without pandemic policies)
  - Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- Other subsidies/benefits:
  - Child Care and Development Fund (CCDF; child care subsidies)
  - Low Income Home Energy Assistance Program (LIHEAP)
  - Public and subsidized housing
- Taxes:
  - Federal income taxes and credits
  - State income taxes and credits
  - Payroll taxes

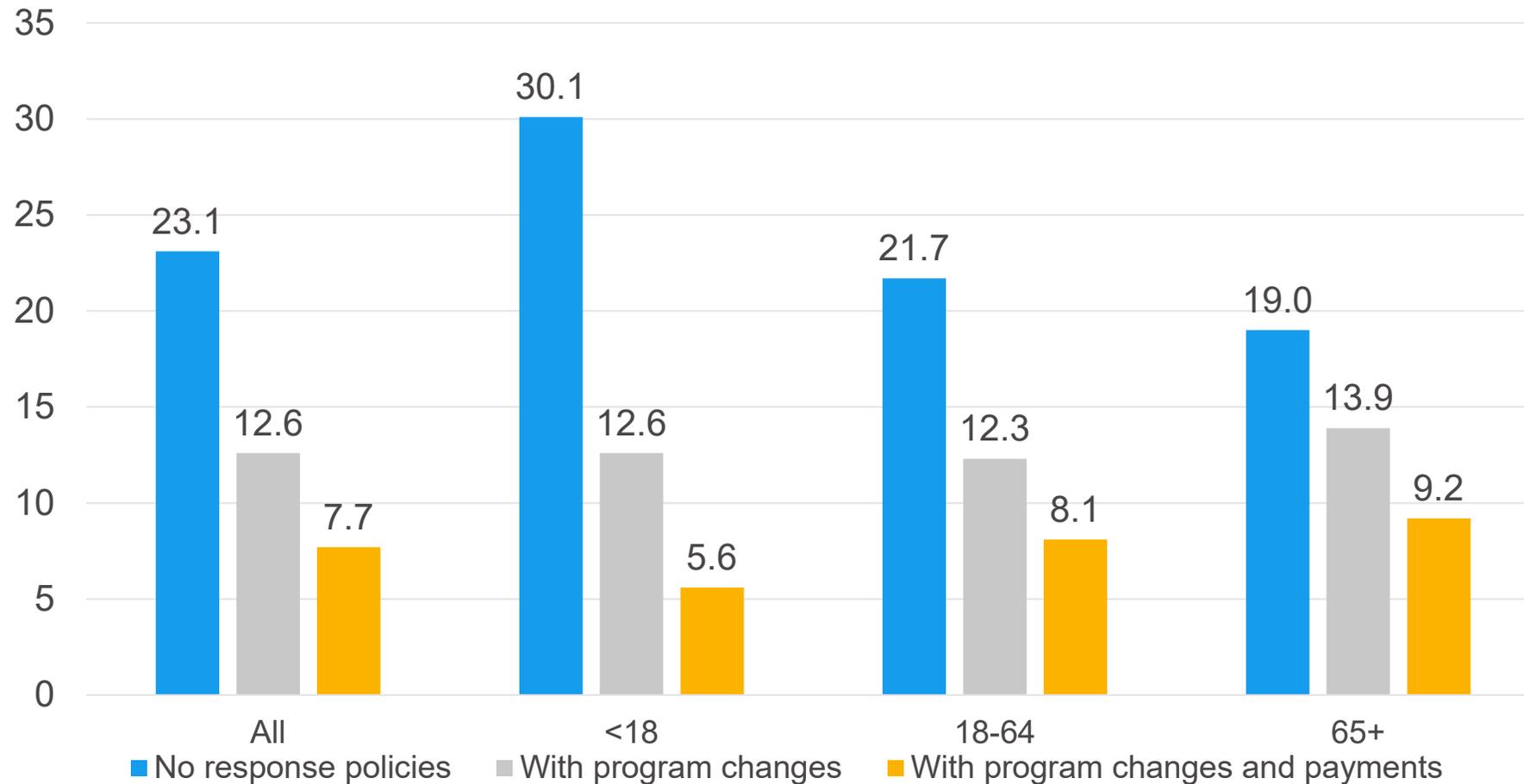
# Two Kinds of Simulations

- “Baseline” simulations
  - Use real-world rules
  - Create caseloads for benefit programs that mimic real-world caseloads
  - For programs included in the ACS, correct for under-reporting
- Alternative simulations
  - Hypothetical or proposed policies in one or multiple programs

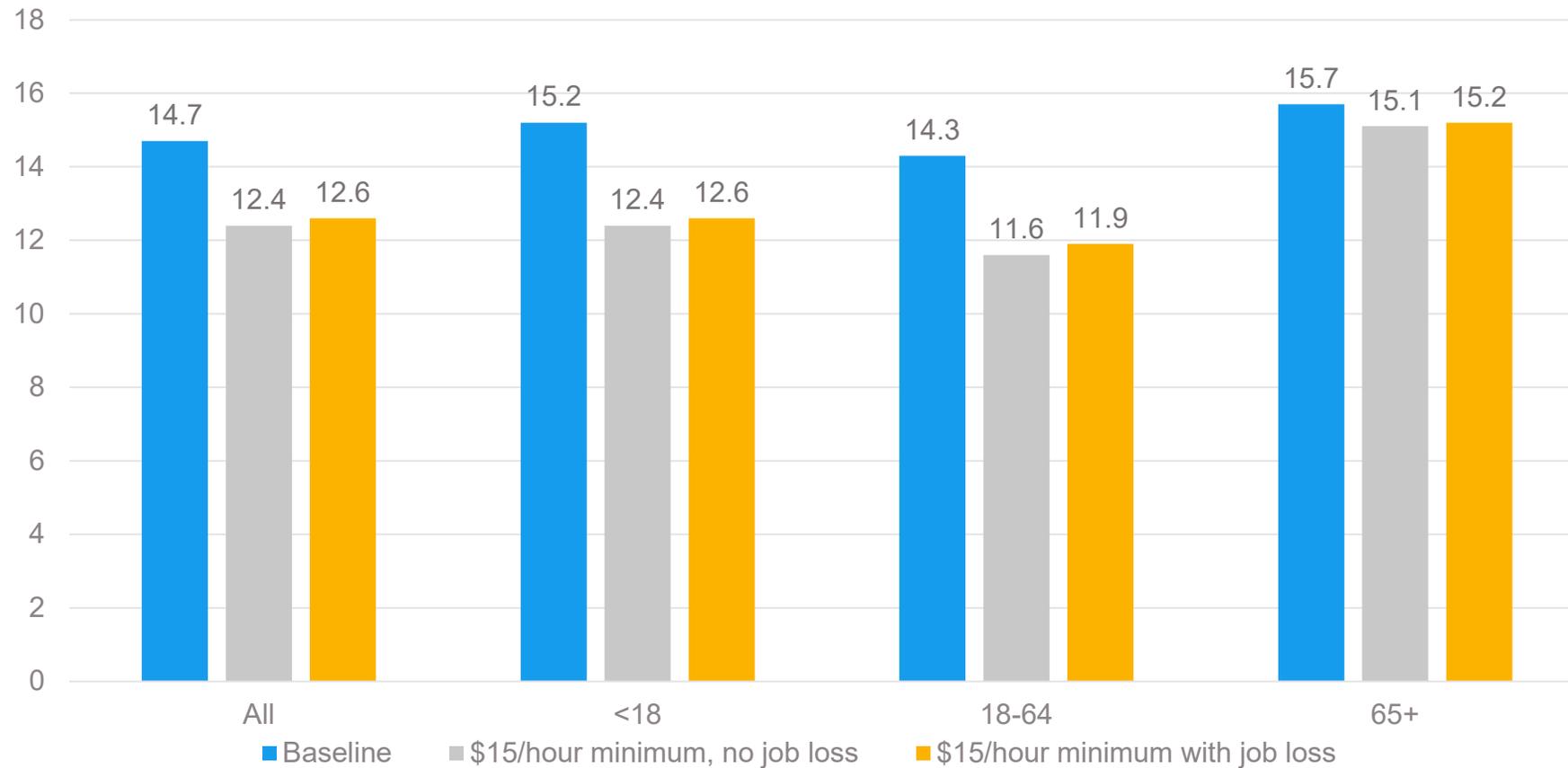
# How We Use ATTIS To Assess Anti-Poverty Impact

- The baseline
  - Start from a set of “baseline” simulations
  - Compute baseline SPM poverty rates with the combined ACS and ATTIS data
    - Results differ from rates based on public-use data due to use of simulated benefit data
- The alternative
  - Simulate the programs again with the policy changes
  - Pick up all the interactions
  - Compute SPM poverty again with the modified benefit and tax data

# Example #1: Impact of COVID Response Policies in 2021 SPM poverty rate without and with response, by age group



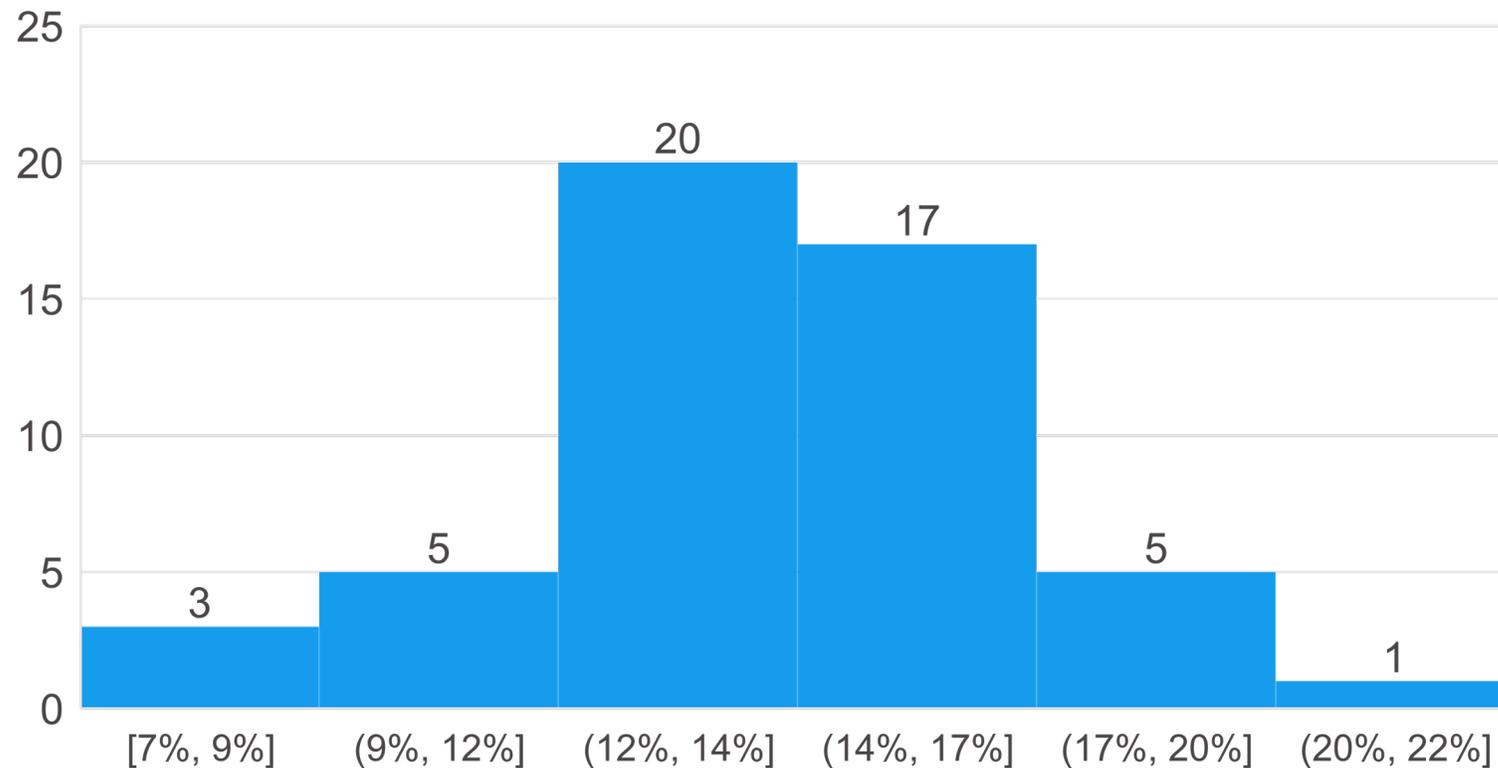
## Example #2: Simulation of nationwide \$15/hour minimum wage, 2022 SPM poverty rate before and after change, by age group



## Example #2, continued:

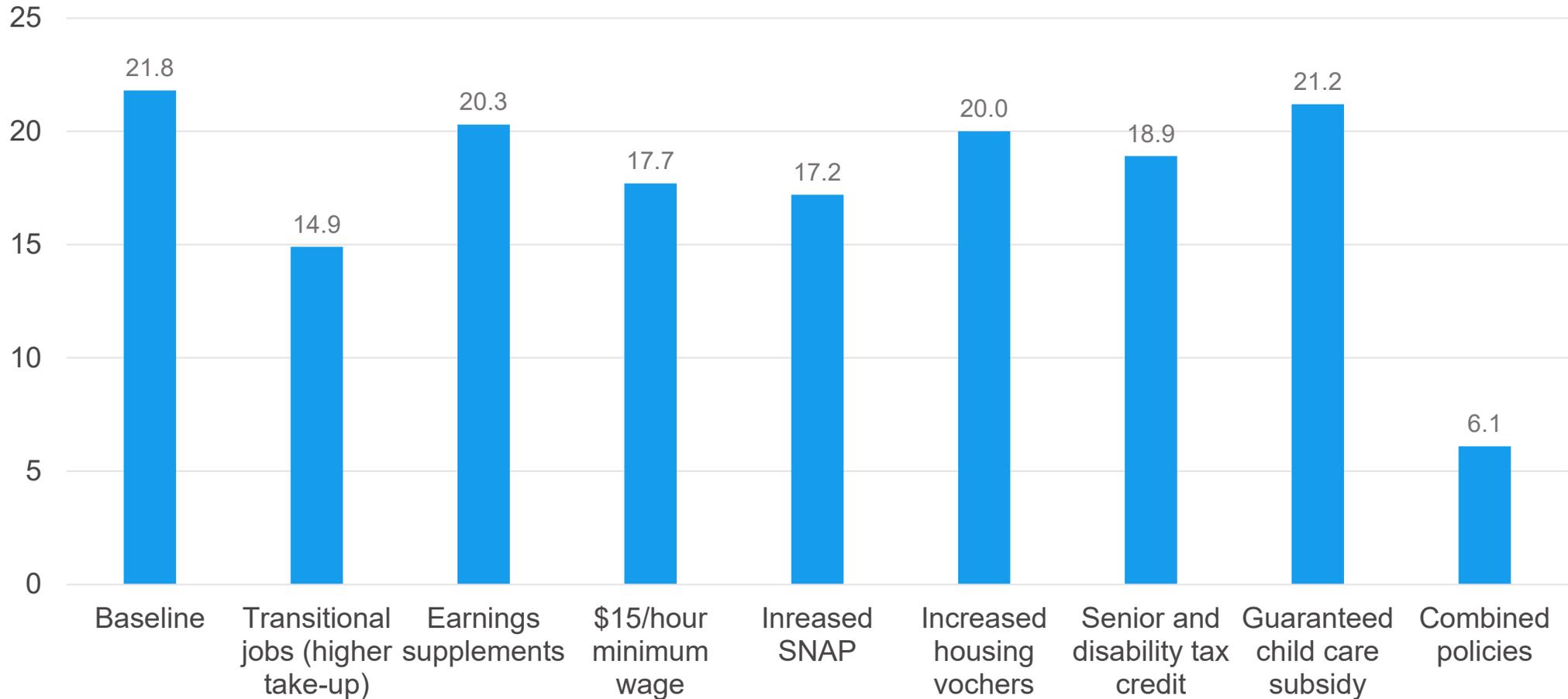
### Simulation of nationwide \$15/hour minimum wage, 2022

Number of states by percentage reduction in number of people below SPM poverty

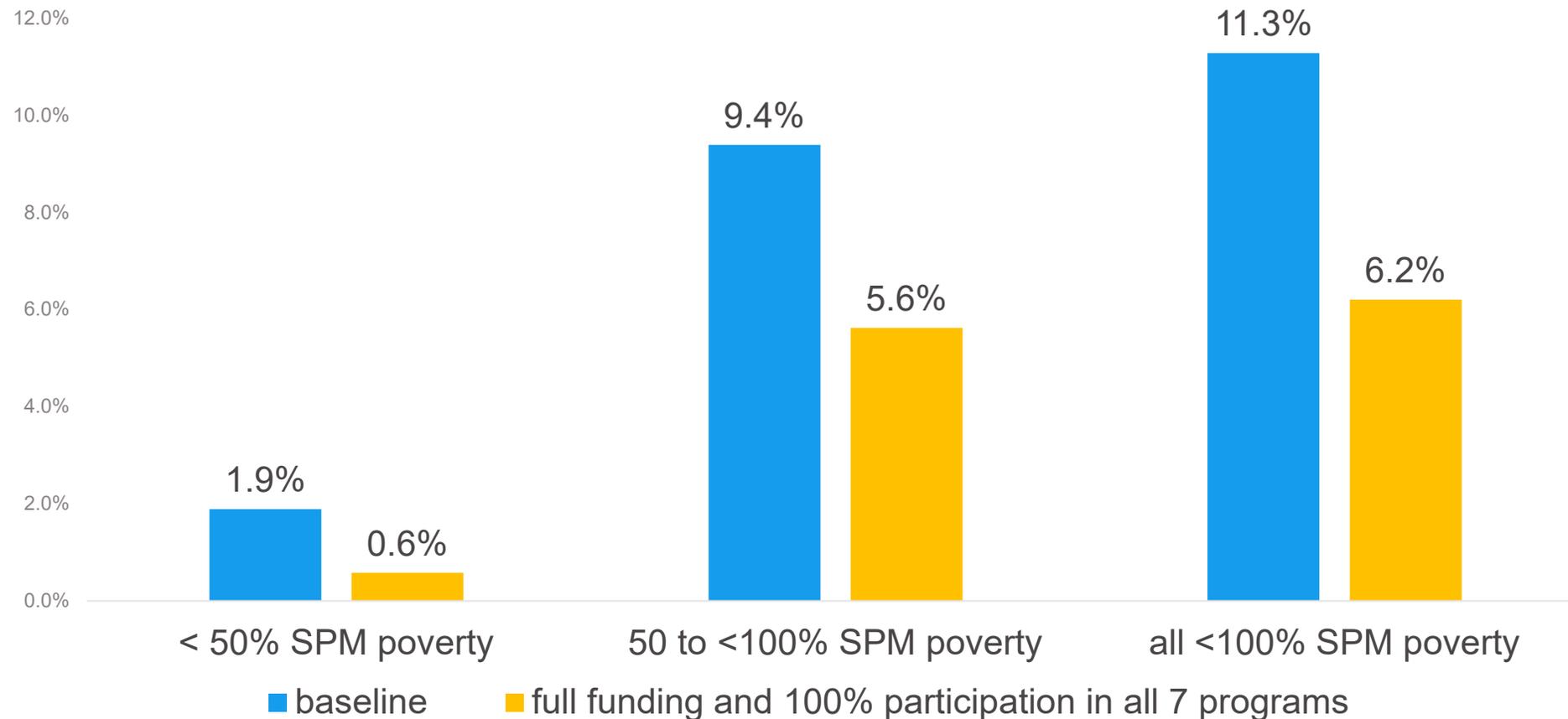


### Example #3:

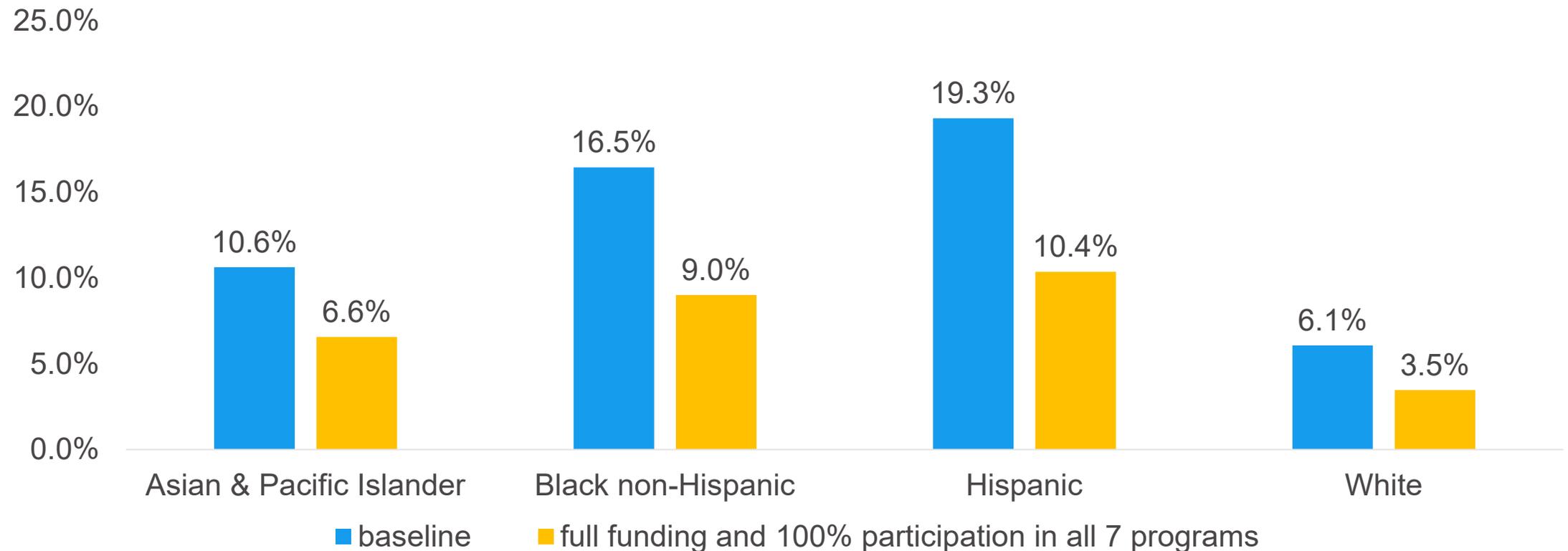
## A package of hypothetical policy changes in New York City, 2014 Children's SPM poverty rate before and after change, by age group



## Example #4: 100% Participation and Full Funding in 7 Safety-Net Programs–Illinois, 2018 Children’s SPM Poverty at Baseline and With the Policy



## Example #4, continued: 100% Participation and Full Funding in 7 Safety-Net Programs–Illinois, 2018 Children’s SPM Poverty by Race and Ethnicity



# Full ATTIS team and contributors

- Senior research leadership: Linda Giannarelli, Laura Wheaton, Sarah Minton
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- Advisors: Greg Acs, Elaine Waxman

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# Links

- Analyses
  - Impacts of COVID relief policies:
    - <https://www.urban.org/research/publication/simulating-effects-15-hour-federal-minimum-wage-poverty-and-resources>
  - Minimum wage analysis:
    - <https://www.urban.org/research/publication/exploring-effects-15-hour-federal-minimum-wage-poverty-earnings-and-net-family>
  - NYC policy options
    - <https://www.urban.org/research/publication/how-much-could-policy-changes-reduce-poverty-new-york-city>
  - Illinois 100% participation analysis:
    - <https://www.urban.org/research/publication/value-unclaimed-safety-net-benefits-illinois>
- More information about ATTIS: <https://www.urban.org/research-methods/attis-microsimulation-model>