



# **TAX CREDITS FOR WORKING FAMILIES: POWERFUL TOOLS TO IMPROVE HEALTH**

**GBPI**   
Georgia Budget & Policy Institute



**EMORY**

**ROLLINS  
SCHOOL OF  
PUBLIC  
HEALTH**

# Budget and tax policy

## *What they mean for well-being and equity*

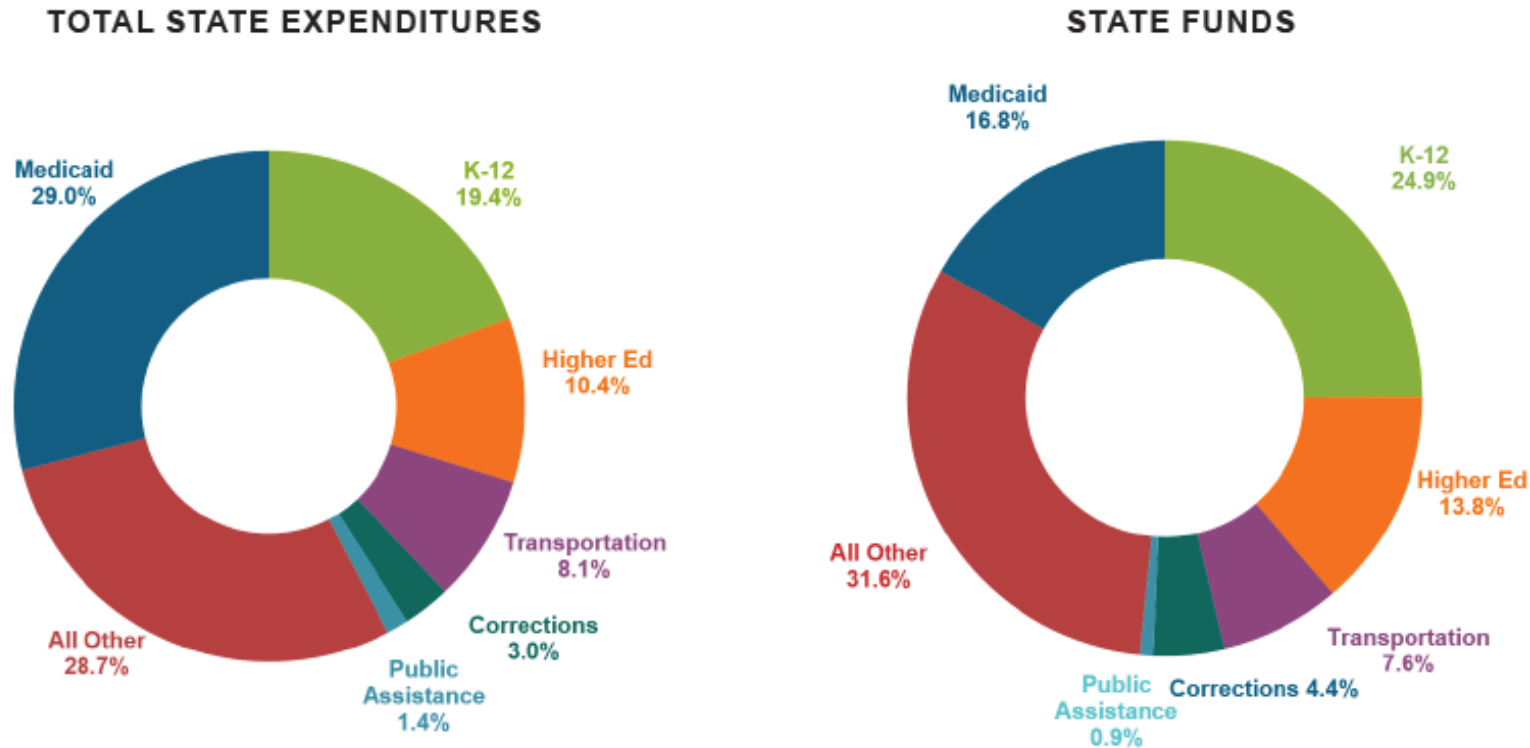
Georgia Budget and Policy Institute  
August 28, 2018



**RWJF mission: Building a Culture of Health in the U.S. where everyone has a fair and just opportunity to be healthy**



# More than half of state spending goes to education and health care

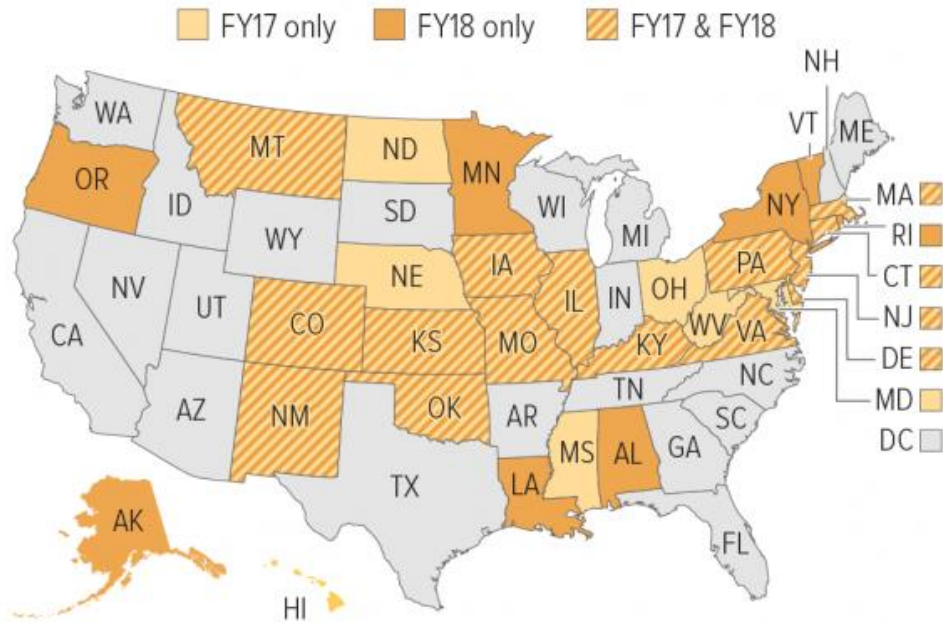


*Total state expenditures are all federal and state funds. State funds are general funds and other state funds combined, excluding bonds.*



# Even with an improved national economy, states are under numerous fiscal pressures

## 30 States Addressed Revenue Shortfalls in Fiscal Years 2017 and 2018



CBPP analysis of state budget documents and news sources.

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

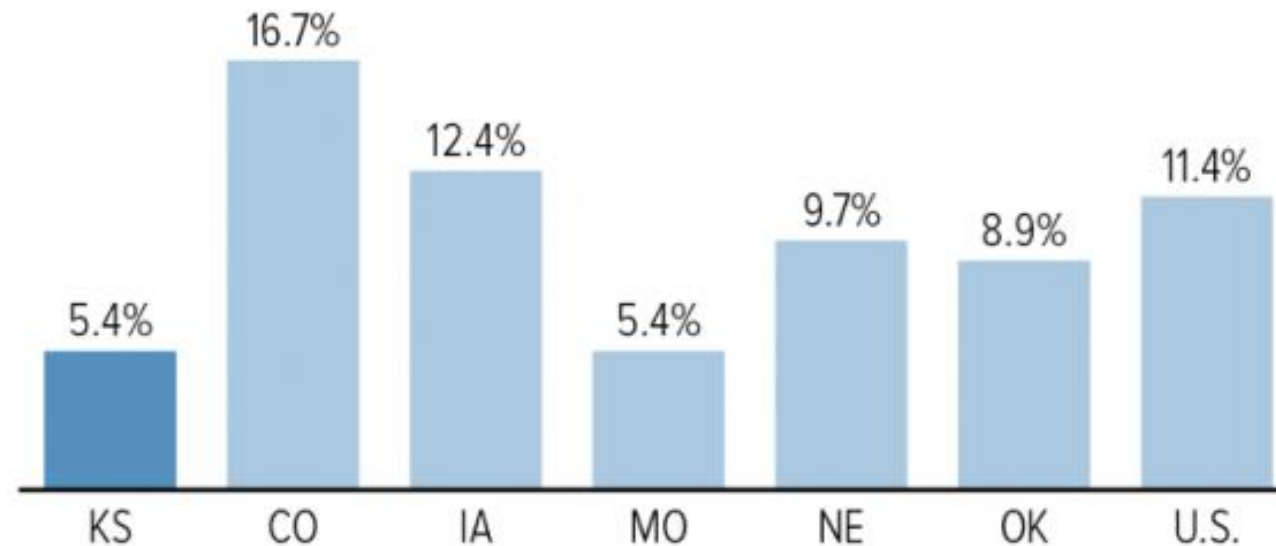
- All states, except Vermont, must balance their budgets
- 16 states require supermajority for tax increases
- Federal tax bill
  - 29 states minimal revenue gains, no change, or losses
  - Possible federal spending cuts
- 11 states have enacted large tax cuts since 2011



# State tax cuts don't generally lead to sustained economic growth

## Economic Growth: Kansas Lagged All Its Neighbors and U.S. After Cutting Taxes

Growth in inflation-adjusted private-sector gross domestic product



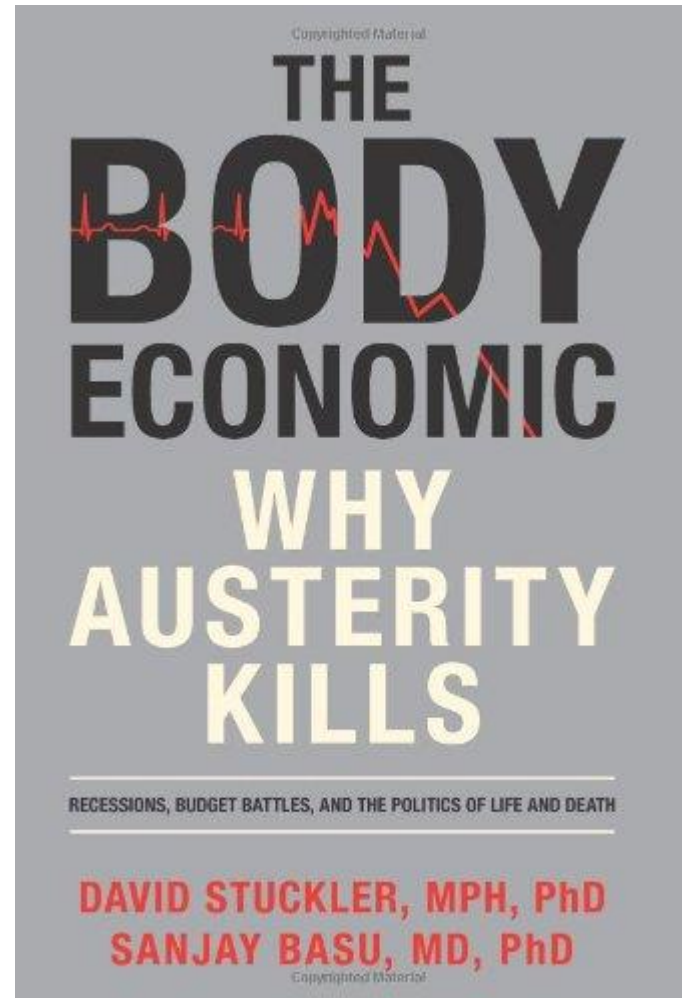
Note: Data cover fourth quarter 2012 (the quarter before the Kansas tax cuts took effect) to second quarter 2017 (the quarter in which the tax cuts were scaled back).

Source: Bureau of Economic Analysis, 2017





# Large spending cuts during recessions may be bad for our health



# Evidence is emerging on spending and health outcomes

- McCullough et al, AJPM 2017: Counties spending more on public welfare and sanitation (and community health care and public health) were more likely to be associated with being an “over-performing” county in County Health Rankings
- Chetty et al, JAMA 2016: Communities with greater local government expenditures had less income-related inequality in life expectancy
- Bradley et, Health Affairs 2016: States with higher ratios of social-to-health spending had improved health outcomes
- Rigby et al, Health Affairs 2016: States with higher tax credits for poor residents had better health outcomes than those without

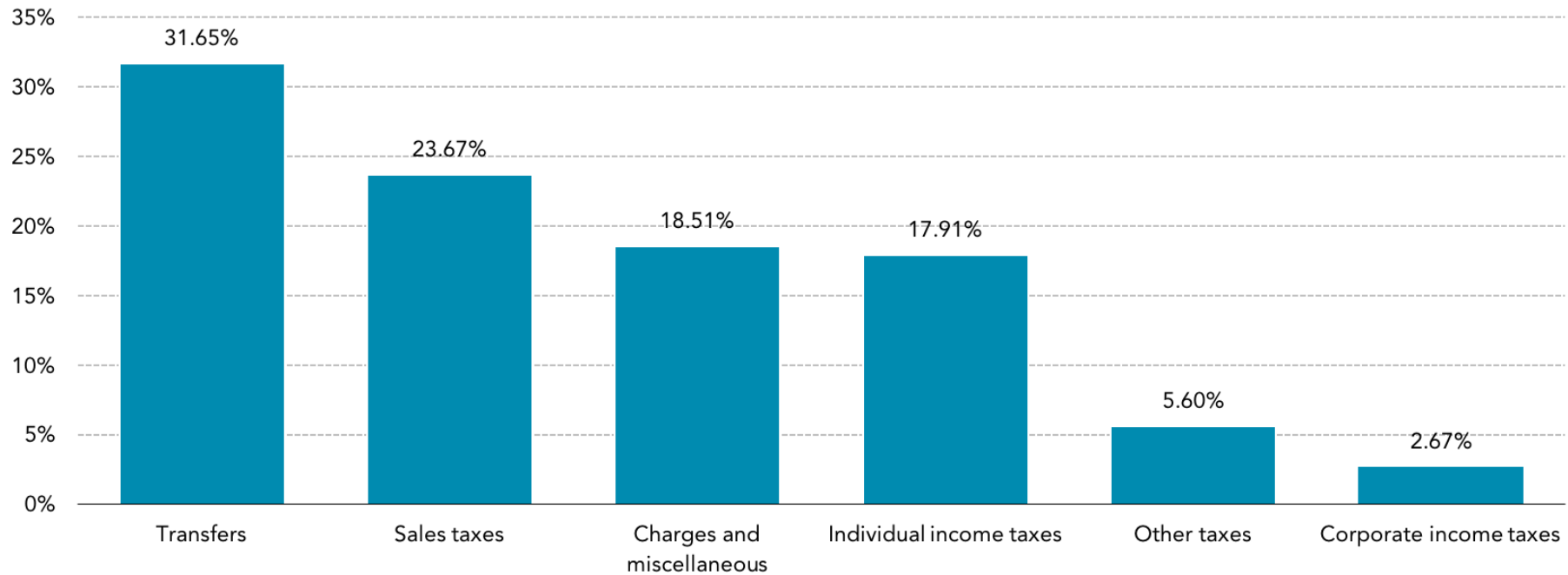




# Sales and income taxes are major sources of non-federal revenue

FIGURE 1

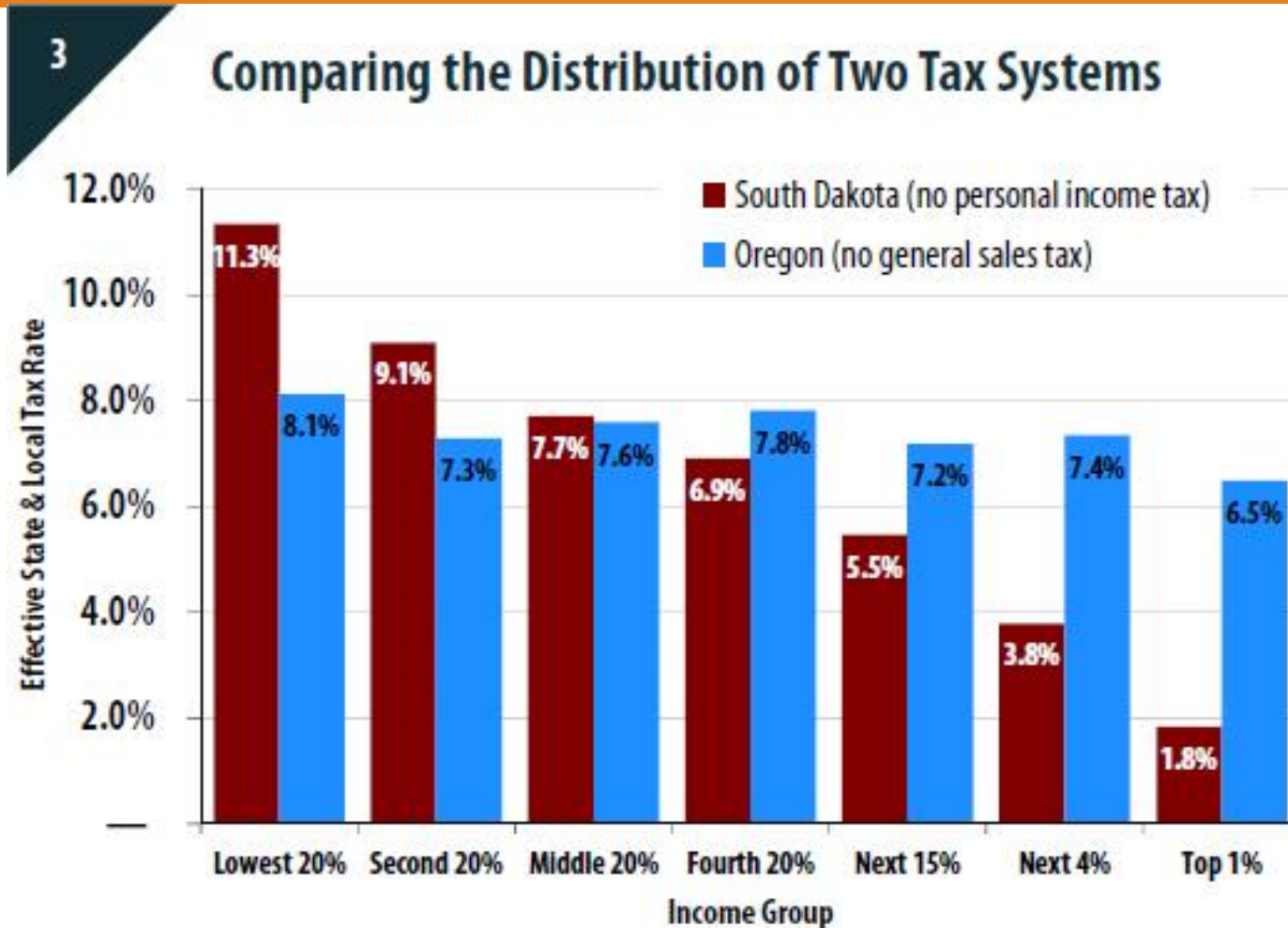
Total State General Revenue by Source  
2014



Sources: Urban-Brookings Tax Policy Center, State & Local Government Finance Data Query System.



# States depending less on income taxes (and more on sales taxes) have more regressive tax systems

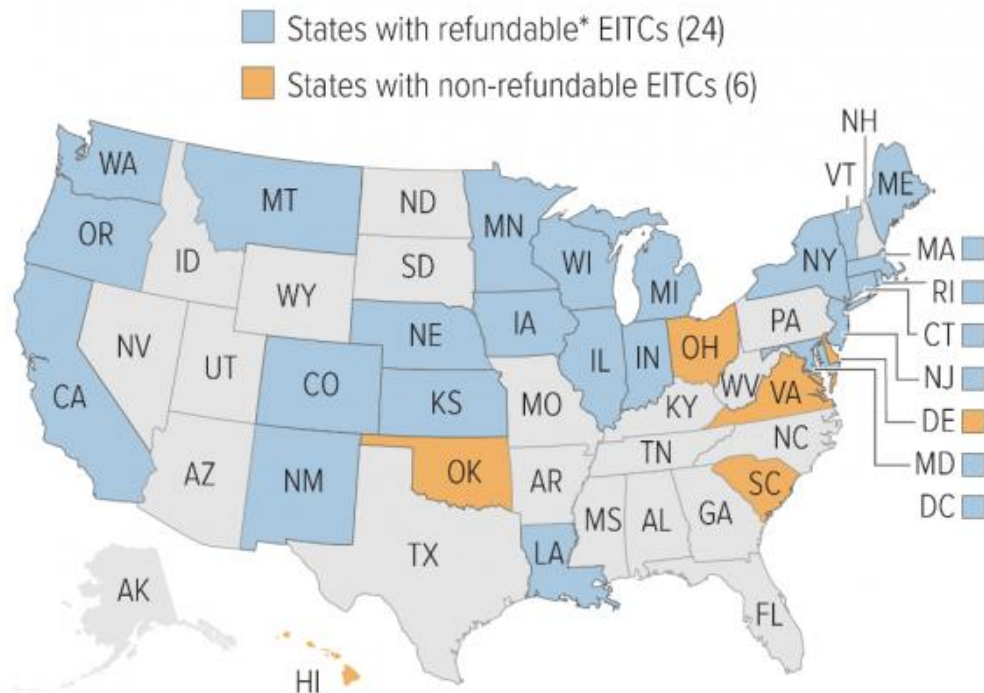


Source: Institute on Taxation and Economic Policy (ITEP)



# An Earned Income Tax Credit (EITC) is progressive

## Twenty-nine States and DC Have Enacted EITCs, 2017



\*Refundable EITCs give working households the full value of the credit they earn even if it exceeds their income tax liability.

Source: CBPP analysis

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

- 24 states with refundable EITC
  - State credits are 5% to 85% of federal credit
- Average annual federal credit is \$2,500
  - Median income of recipients is \$14,118
  - 27.5 million families and individuals
- Improves economic and health outcomes



# Investing in the fiscal health/population health nexus

## **Center on Budget and Policy Priorities, State Priorities Partnership, and Georgia Budget Policy Institute**

- Improved understanding of how state budget and tax decisions affect
- State policymakers giving greater consideration to these health impacts
- Preservation or expansion of state investments in effective public programs
- Fair and sustainable tax systems that create health co-benefits.
- Intensive work in 10 states: CA, **GA**, KY, MA, NC, NJ, NM, OH, TX, WA





# Role of health funders in fiscal (and social) policy

## ***Provide data to inform decision-making***

- [CityHealthDashboard.org](http://CityHealthDashboard.org)

## ***Explore the effects of social policies on health***

- [PoliciesforAction.org](http://PoliciesforAction.org)

## ***Conduct analyses on policy reform proposals***

- [Urban.org/features/safety-net-solid-ground](http://Urban.org/features/safety-net-solid-ground)

## ***Support multi-sector community development/health strategies***

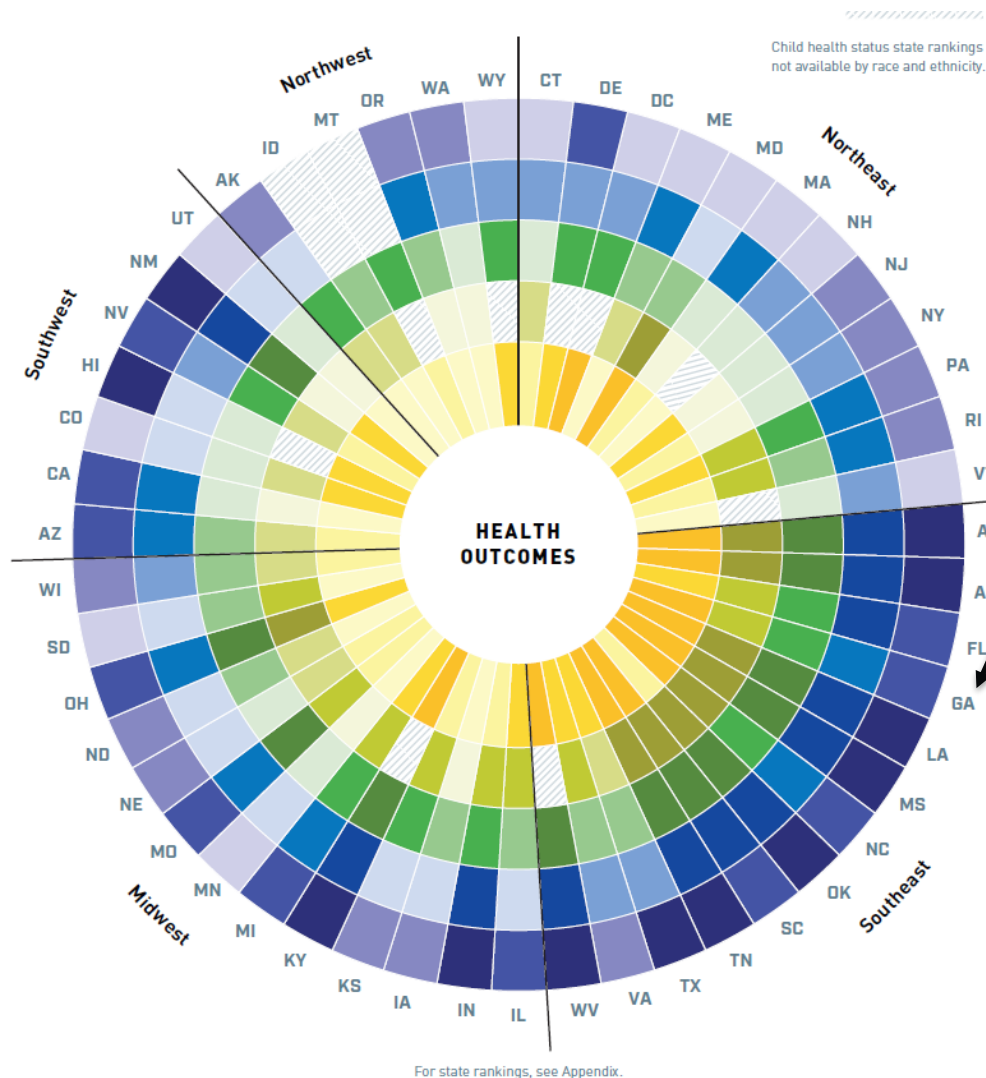
- [SparccATL.org](http://SparccATL.org)

## ***Support non-lobbying advocacy on key policy issues***

- American Cancer Society Medicaid initiative



# Place matters to well-being and opportunity – states



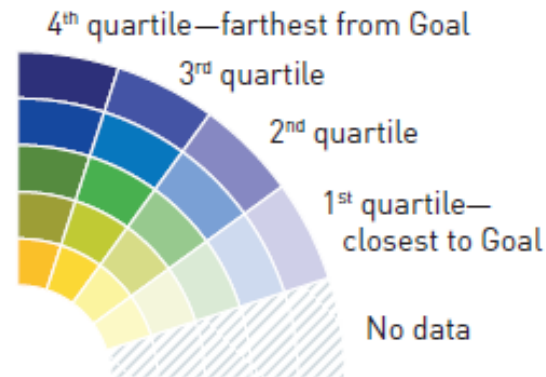
Georgia in bottom 50% on health outcome indicators

## HOW TO READ THIS CHART

### Health Outcomes Indicators

Adult Health Status  
Mental Health  
Premature Mortality  
Infant Mortality  
Low Birth Weight

### Distance to the HOPE Goal



Child health status state rankings not available by race and ethnicity.

**Health, Opportunity and Equity Initiative (HOPE)**  
National Collaborative for Health Equity, and Texas  
Tech University, Virginia Commonwealth University



# Place matters – cities and neighborhoods

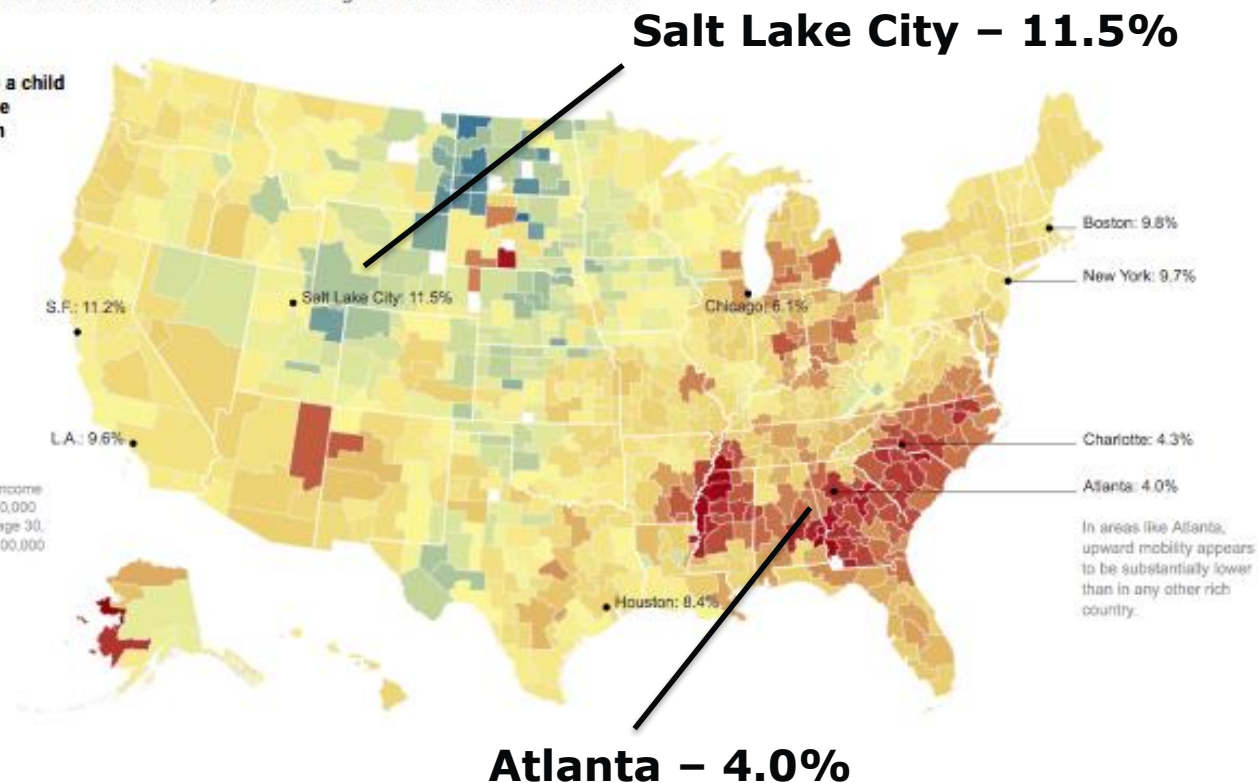
## In Climbing Income Ladder, Location Matters

A study finds the odds of rising to another income level are notably low in certain cities, like Atlanta and Charlotte, and much higher in New York and Boston.

The chance a child raised in the bottom fifth rose to the top fifth

35%  
20%  
15%  
10%  
4%

The top fifth is equal to family income of more than \$70,000 for the child by age 30, or more than \$100,000 by age 45.



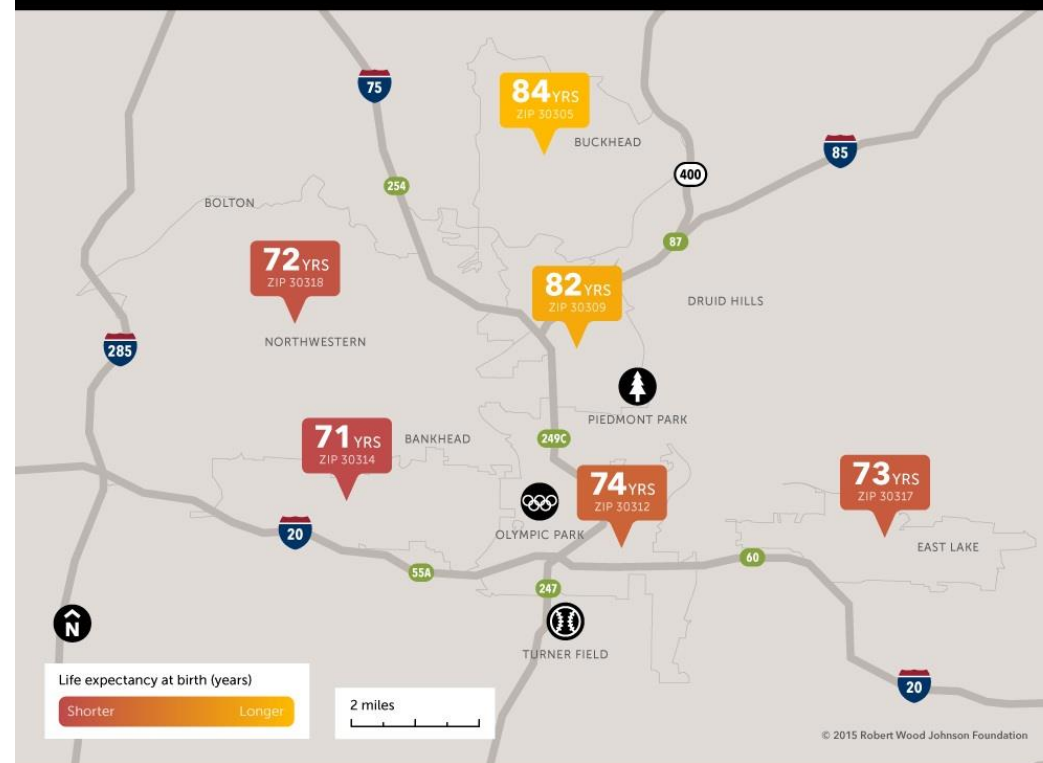
Source: NY Times analysis of Chetty et al, *National Bureau of Economic Research*, June 2014

ATLANTA, GEORGIA

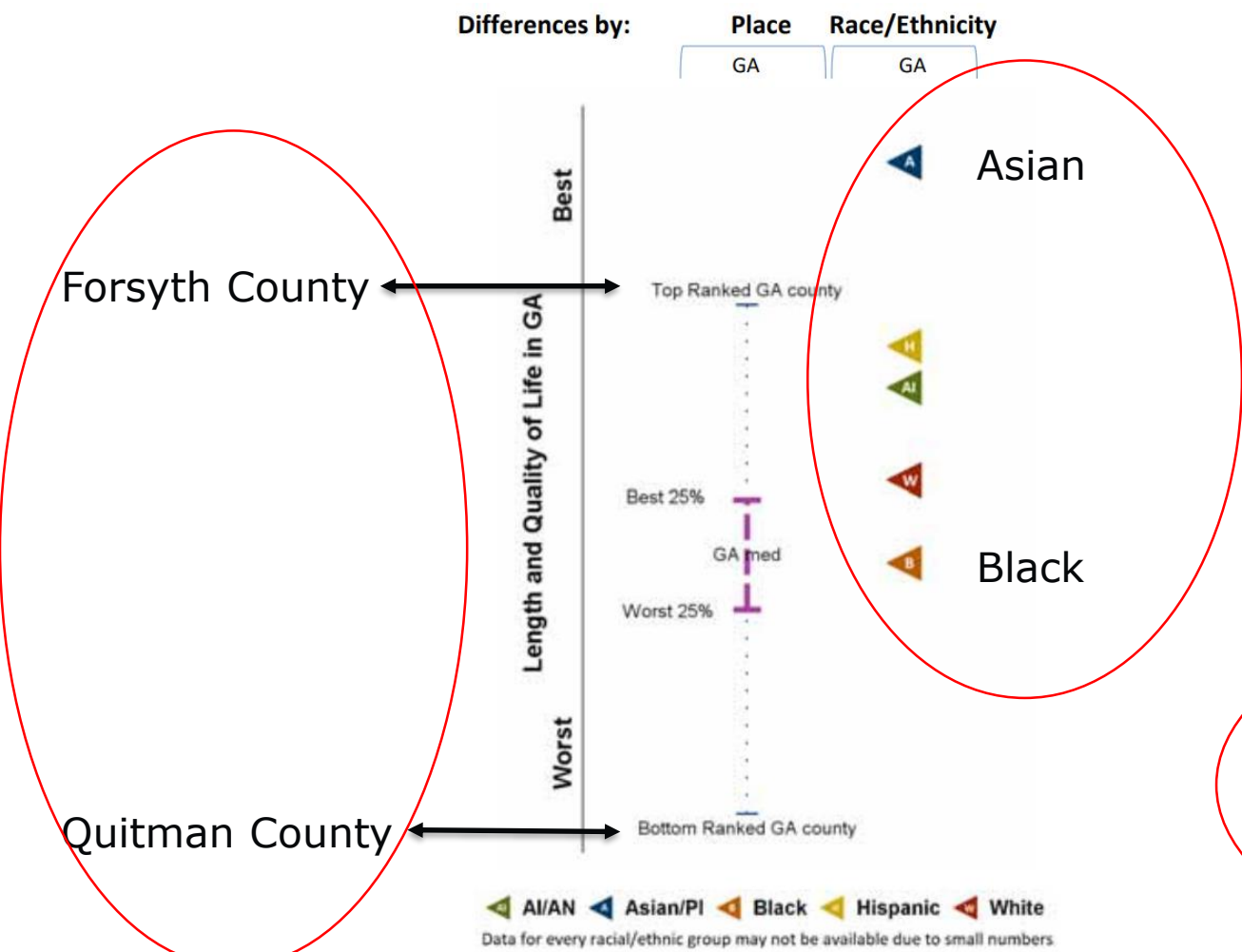
Follow the discussion

## Short Distances to Large Gaps in Health

#CloseHealthGaps



# Race also matters to well-being and opportunity



## Forsyth County

### Social & Economic Factors

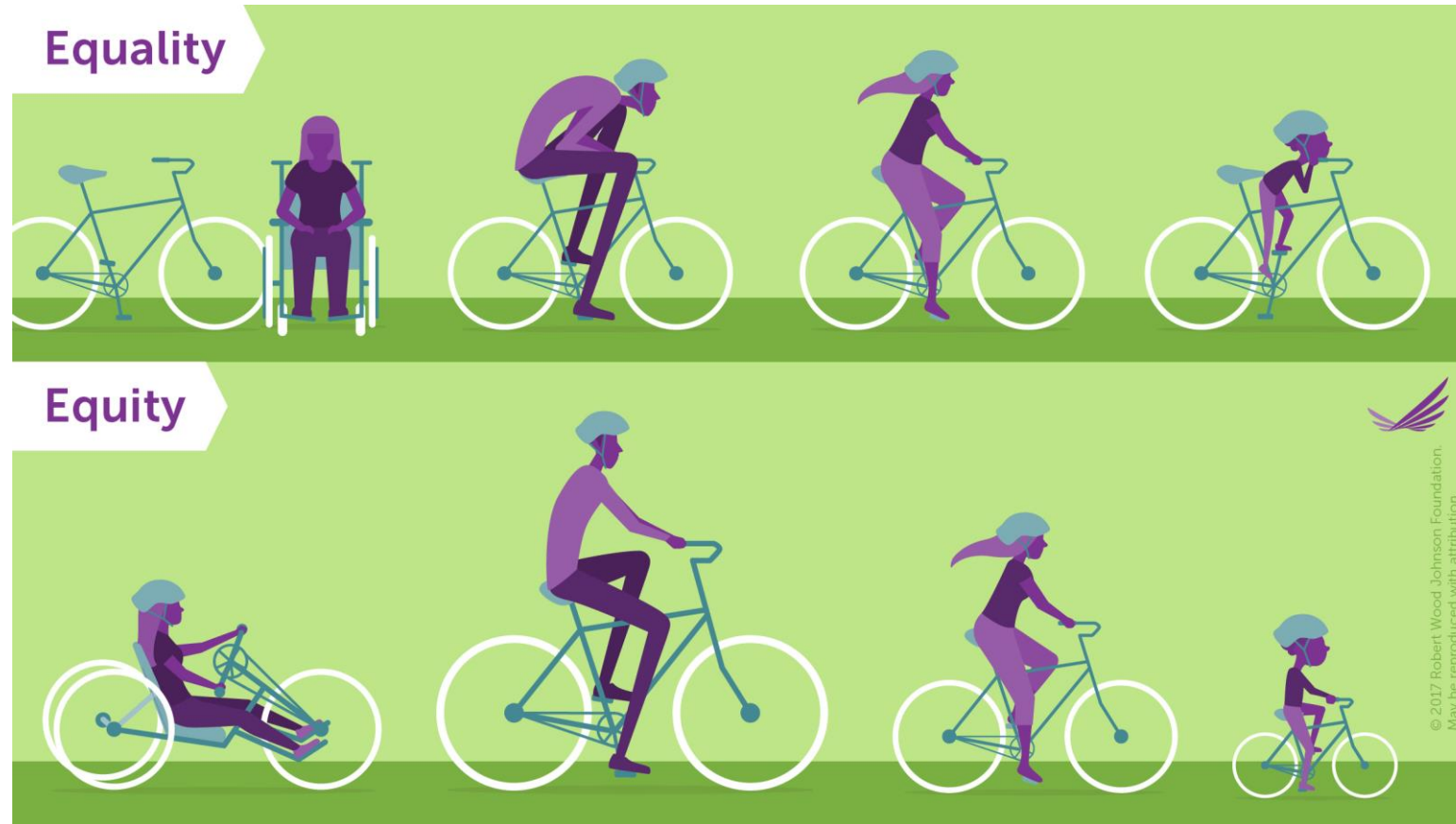
High school graduation	94%
Some college	79%
Unemployment	4.2%
Children in poverty	<u>7%</u>

% Children in Poverty	7%
% Children in Poverty (Black)	16%
% Children in Poverty (Hispanic)	28%
% Children in Poverty (White)	4%





# Equity is essential



# Equity can be achieved

## Principles

- Policy is critical
- Everyone benefits
- Gaps must close

## Strategies

- Build power
- Promote fairer tax systems
- Invest early
- Target resources
- Foster integration





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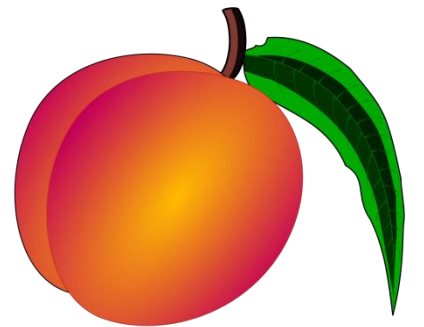
# Georgia Work Credit:

## A Tool to Improve Health and Promote Equity

August 28, 2018



*Georgia*  
Work  
Credit



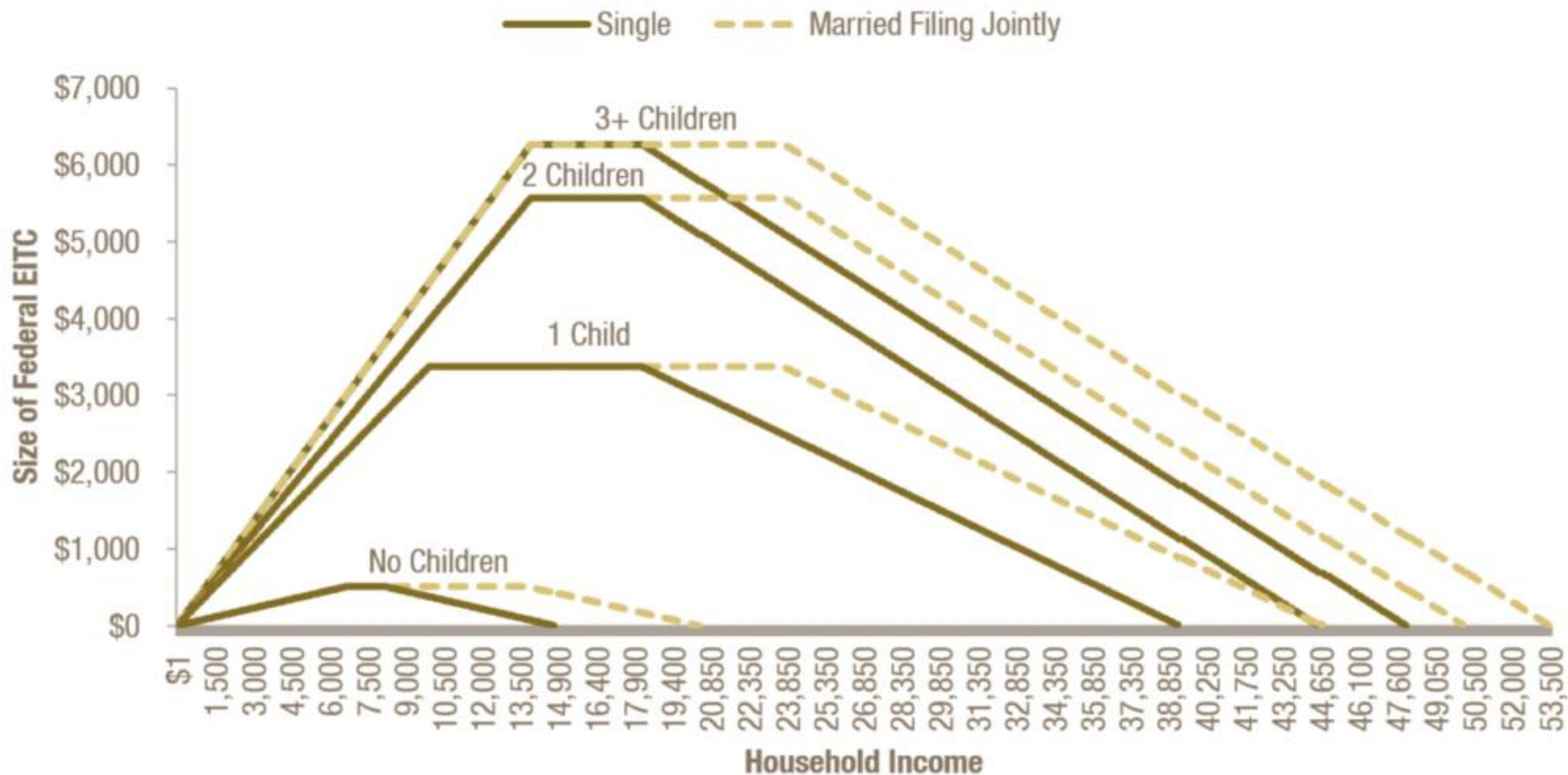


# EARNED INCOME TAX CREDIT (EITC)

- Federal tax credit for families with low and moderate wages
- 1 million Georgia households claimed the federal EITC in 2015 – **2.6 million individuals, including 1.2 million children**
- Lifts about a **quarter-million** Georgians out of poverty each year
- Helps working Georgians afford the basics and work their way into the middle class

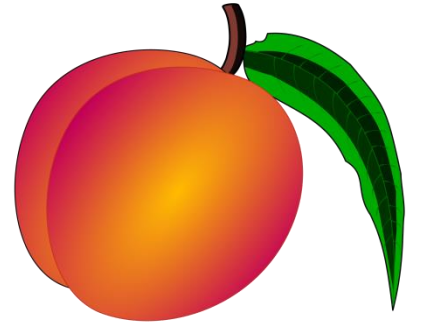
# EITC's Unique Structure Rewards, Encourages Work

Federal EITC value by income, marriage status and number of children, 2016



# GEORGIA WORK CREDIT

*Georgia*  
**Work  
Credit**



29 states and D.C. have their own EITCs - providing a limited credit against state and local taxes

Georgia Work Credit would provide a bottom-up tax cut, saving families up to

**\$630 a year**

**\$303 Million**

could go into the state economy from a Georgia Work Credit

# JANE, SINGLE MOTHER OF ONE



Jane is a single mother of one in Macon who works fulltime as a cashier, making minimum wage.

Earns \$14,500 annually before taxes

Owes about \$154 a year in Georgia state income taxes

A refundable Georgia Work Credit at 10 percent of the federal credit comes out to \$337 for Jane, delivering her an **estimated state refund of \$183.**



**HOW CAN THE GEORGIA WORK  
CREDIT SUPPORT HEALTH?**

# HEALTH BENEFITS DOCUMENTED BY EXTENSIVE RESEARCH

❖ Maternal Health

❖ Infant and Child Health

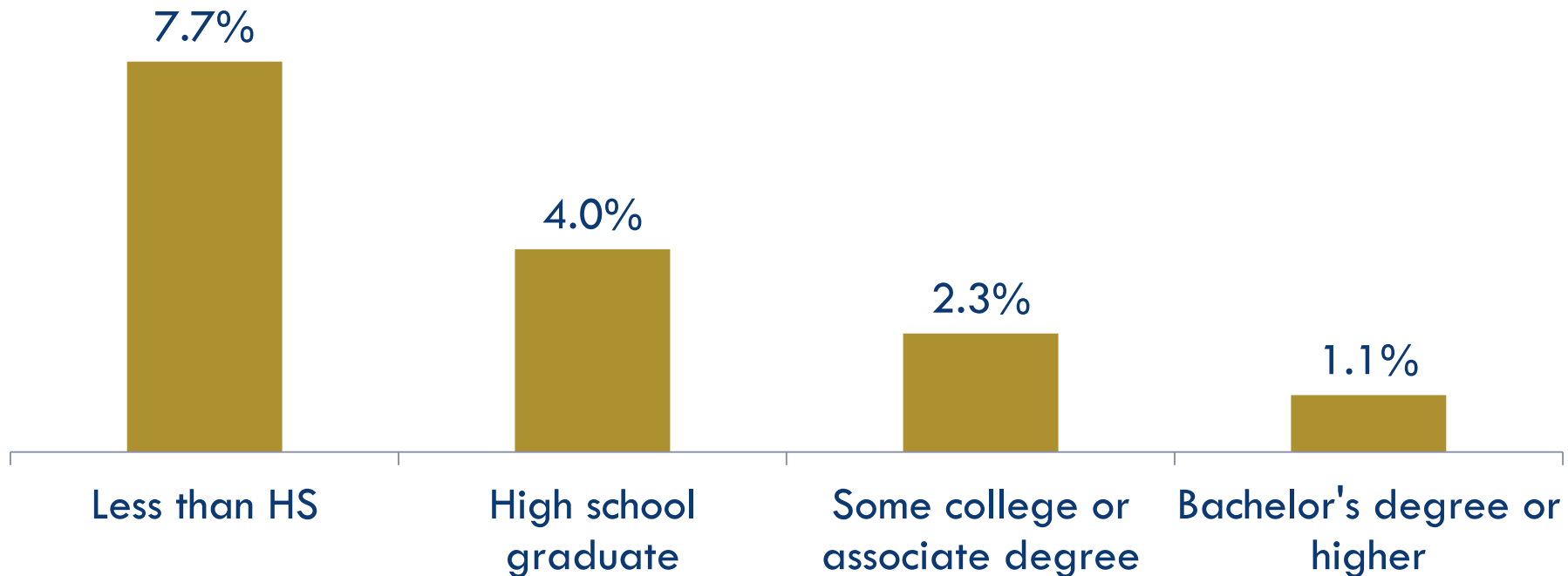
❖ Mental Health

**MATERNAL HEALTH**

# HIGHER EITCS CAN HELP MORE MOTHERS RECEIVE PRENATAL CARE

## Georgia Mothers with Less Education Are Less Likely to Receive Prenatal Care

% of Georgia Births in Which Mother Reports Receiving No Prenatal Care, 2016



Source: CDC Behavioral Risk Factor Surveillance System, 2016.



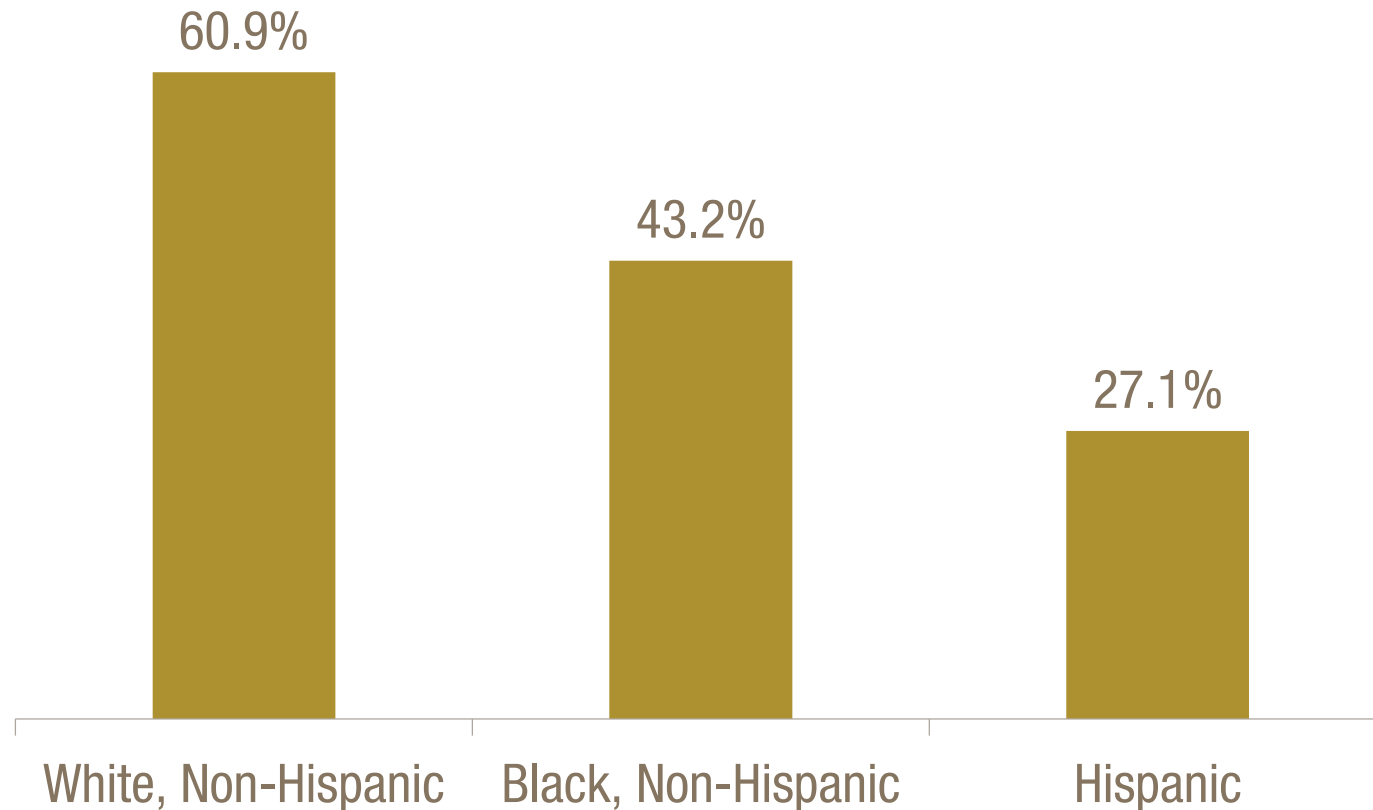
# EITC EXPANSION AND OVERALL HEALTH STATUS

Following EITC expansion, mothers with two or more children receiving higher EITC payments increased likelihood of reporting “excellent” or “very good” health by:

**1.35 percentage points**

# BLACK & HISPANIC GEORGIA MOTHERS LESS LIKELY TO REPORT EXCELLENT OR VERY GOOD HEALTH

% of Georgia women with 2 or more children reporting either “excellent” or “very good” health, 2016



Source: CDC Behavioral Risk Factor Surveillance System, 2016.

# **INFANT AND CHILD HEALTH**

# STATE EITC ASSOCIATED WITH IMPROVEMENTS IN BIRTHWEIGHT

Georgia ranks:

**5<sup>th</sup> highest**  
in share of newborns with low  
birthweights

**5<sup>th</sup> highest**  
in rates of infant mortality

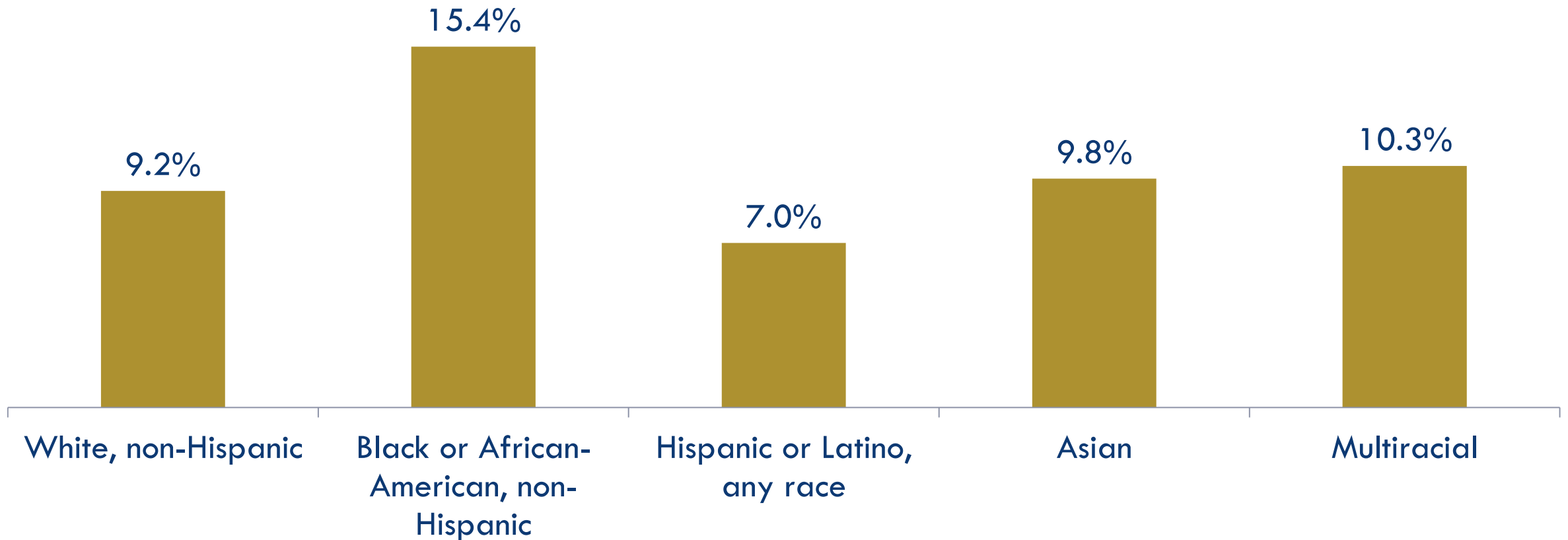
A refundable EITC set at 10 percent of the federal credit is *estimated to reduce low birthweight in Georgia by 8.4 percent.*

**1,047 fewer low birthweight babies each year**



# LOW BIRTHWEIGHT MUCH HIGHER AMONG BIRTHS TO BLACK MOTHERS

% of low birthweight babies born to mothers with high school education or less, 2017



Source: Georgia Department of Public Health OASIS, 2017.

# EITC CAN RESULT IN GREATER IMPROVEMENTS FOR BLACK MOTHERS

For every \$1,000 increase in the EITC:

**5.6%**

decline in low birthweight  
among ALL mothers

**7.2%**

decline in low birthweight  
among BLACK mothers

# STATE EITCS AND CHILD HEALTH

## Mother-reported health

A \$100 increase in value of state EITC associated with:

**1.2 percentage point decline**  
in mother reporting child to be  
in fair or poor health status

**3.4 percentage point increase**  
in mother reporting child to be  
in excellent health

Baughman RA and Duchovny N. "State earned income tax credits and the production of child health: insurance coverage, utilization, and health status." National Tax Journal. 2016; 61 (1), 103-132.

## Childhood obesity

After the adoption of a state EITC, children in non-metropolitan areas experienced larger reductions in obesity.

Obesity rate in *non-metropolitan* areas of Georgia: **31%**

Obesity rate in *metropolitan* areas of Georgia: **28.8%**

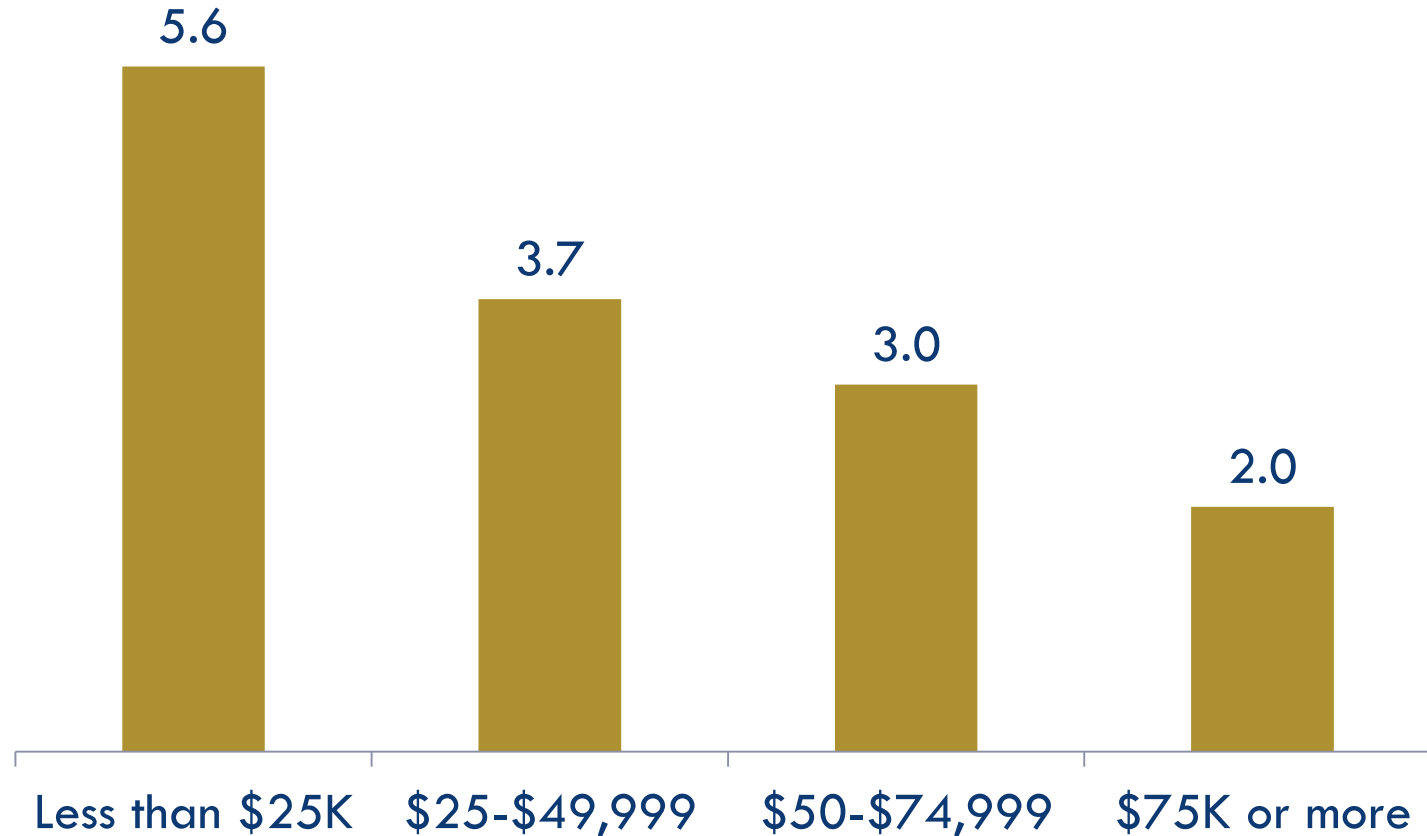
Reagan A. Baughman. "The Effects of State EITC Expansion on Children's Health." (2012). The Carsey School of Public Policy at the Scholars' Repository. 168.

**MENTAL HEALTH**



# GEORGIANS WITH LOWER WAGES REPORT MORE POOR MENTAL HEALTH DAYS

Mean # of days in the past 30 days adults reported their mental health was not good, 2016



Source: America's Health Rankings, 2016.

# INCREASE IN EITC REDUCED POOR MENTAL HEALTH DAYS

\$500 increase in EITC payments  
reduced the number of poor mental  
health days by

**19 percent**

for low-income mothers with two or  
more children.

William N. Evans and Craig L. Garthwaite, "Giving Mom a Break: The Impact of Higher EITC Payments on Maternal Health," *American Economic Journal: Economic Policy*. 2014; 6 (2): 258-90.

# ECONOMIC IMPACT OF POOR MENTAL HEALTH DAYS

One poor mental health day is associated with:

**2.3% reduction in per-capita income growth**

in poorer (more rural) counties

**0.87% reduction in per-capita income growth**

in wealthier (more urban) counties

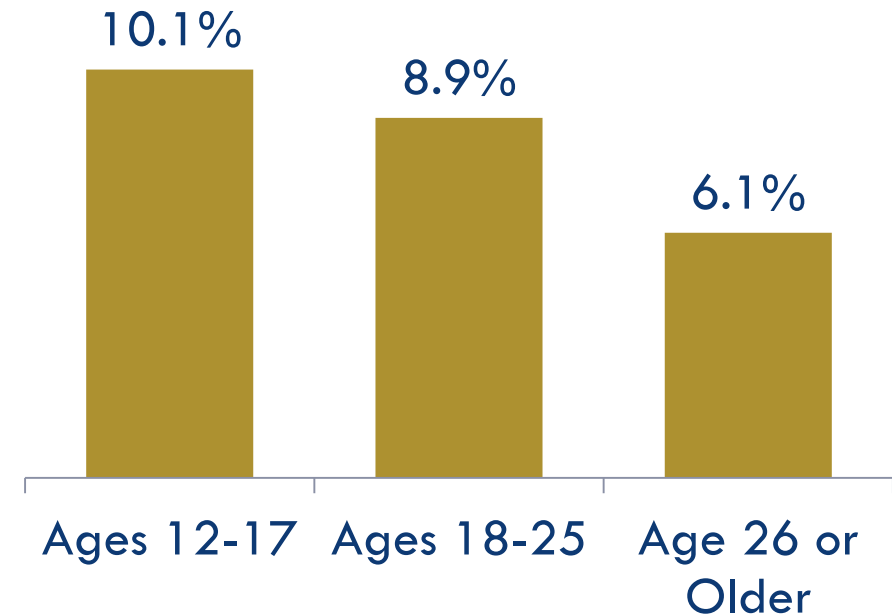
# EITC ASSOCIATED WITH IMPROVEMENTS IN CHILDREN'S BEHAVIORAL HEALTH

Larger EITC payments are associated with higher scores for children on a behavioral index that includes measures such as *peer conflict, hyperactivity, anxiousness and depression.*

Rita Hamad and David H. Rehkopf. "Poverty and Child Development: A Longitudinal Study of the Impact of the Earned Income Tax Credit." *American Journal of Epidemiology*. 2016. 183 (9):775-84.

## Younger Georgians More Likely to Have a Major Depressive Episode in the Past Year

Mean # of days in the past 30 days adults reported their mental health was not good, 2016



Source: National Survey on Drug Use and Health, 2014-2016

# **GEORGIA WORK CREDIT: A TOOL TO BOOST INCOME AND HEALTH**



# A WIN-WIN POLICY

- 29 states and D.C. have a state EITC
- Improve economic security AND promote health equity and improved well-being for families
- Provide economic benefits to Georgia through money injected into local economies AND savings from health improvements

Nearly

**2 in 3**

Georgians support a Georgia Work Credit, according to a July 2018 poll

**FOR MORE INFORMATION & TO STAY INVOLVED, VISIT:  
WWW.GBPI.ORG  
AND  
GEORGIAWORKCREDIT.ORG**



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# Effects of EITC on Birth Outcomes: Research Findings

KA Komro, PhD, S Markowitz, PhD, MD Livingston, PhD, & AC Wagenaar, PhD

Emory University Rollins School of Public Health & Dept of Economics

S Burris, JD, Temple University Beasley School of Law



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# **Understanding How Law Affects Health**

## ***Scientific Contributions from Multiple Disciplines***

- Law
- Social & Behavioral Sciences
- Epidemiology
- Economics
- Statistics



# PUBLIC HEALTH LAW RESEARCH

Theory and Methods



- Framing
- Theories
- Legal Coding
- Research Designs
- Design Elements
- Cost Analysis

Chapter 3. Understanding how law influences environments and behavior: Perspectives from public health. Komro, O'Mara & Wagenaar.

Chapter 14. Natural experiments: Research design elements for optimal causal inference without randomization. Wagenaar & Komro.

Alexander C. Wagenaar and Scott Burris • *Editors*

<http://publichealthlawresearch.org/theory-methods>



# **Family Economic Security Policy: Effects on Infant and Child Health Disparities**

1. Minimum Wage Laws
2. Earned Income Tax Credit (EITC)
3. Unemployment Insurance
4. Temporary Assistance for Needy Families (TANF)

*R01 funded by the National Institute on Minority Health and Health Disparities, 2015-2019*

*Initial policy surveillance and pilot studies funded by the Robert Wood Johnson Foundation  
Public Health Law Research program, 2012-2015*

# Social Determinants of Birth Outcomes Conceptual Framework

Socioeconomic &  
Political Context

Socioeconomic  
Position

Mediators

Birth  
Outcomes

Family  
Economic  
Security Policies



Poverty

Gender &  
Racial  
Discrimination



Health Behaviors

Toxic Stress  
Weathering

Health Care  
Access &  
Quality



Low Birth  
Weight

Preterm Birth

Infant Mortality



Contents lists available at ScienceDirect

## Social Science & Medicine

journal homepage: [www.elsevier.com/locate/socscimed](http://www.elsevier.com/locate/socscimed)



### Effects of state-level Earned Income Tax Credit laws in the U.S. on maternal health behaviors and infant health outcomes



Sara Markowitz<sup>a</sup>, Kelli A. Komro<sup>b,\*</sup>, Melvin D. Livingston<sup>c</sup>, Otto Lenhart<sup>d</sup>,  
Alexander C. Wagenaar<sup>b</sup>

# Contribution

1. Strong quasi-experimental and longitudinal design
  - state-level EITCs
  - multiple policy changes over 20 years
2. Presence and generosity of state EITCs
  - infant health outcomes
  - possible mechanisms via maternal health behaviors

# State EITC

- In 1994, 5 states had an EITC → In 2013, 26 states had an EITC
- State-specific EITC ranges from 3.5% to 40% of the federal amount, varies by number of children and refundability

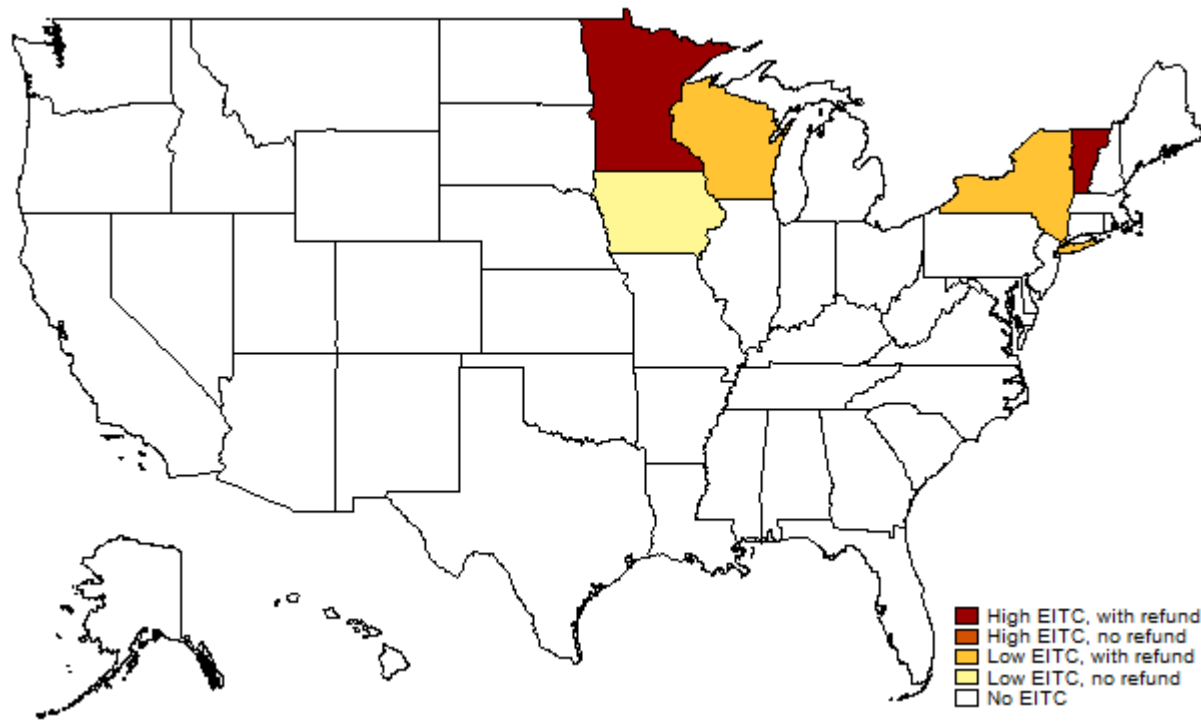
## EITC summary measure

least generous  most generous

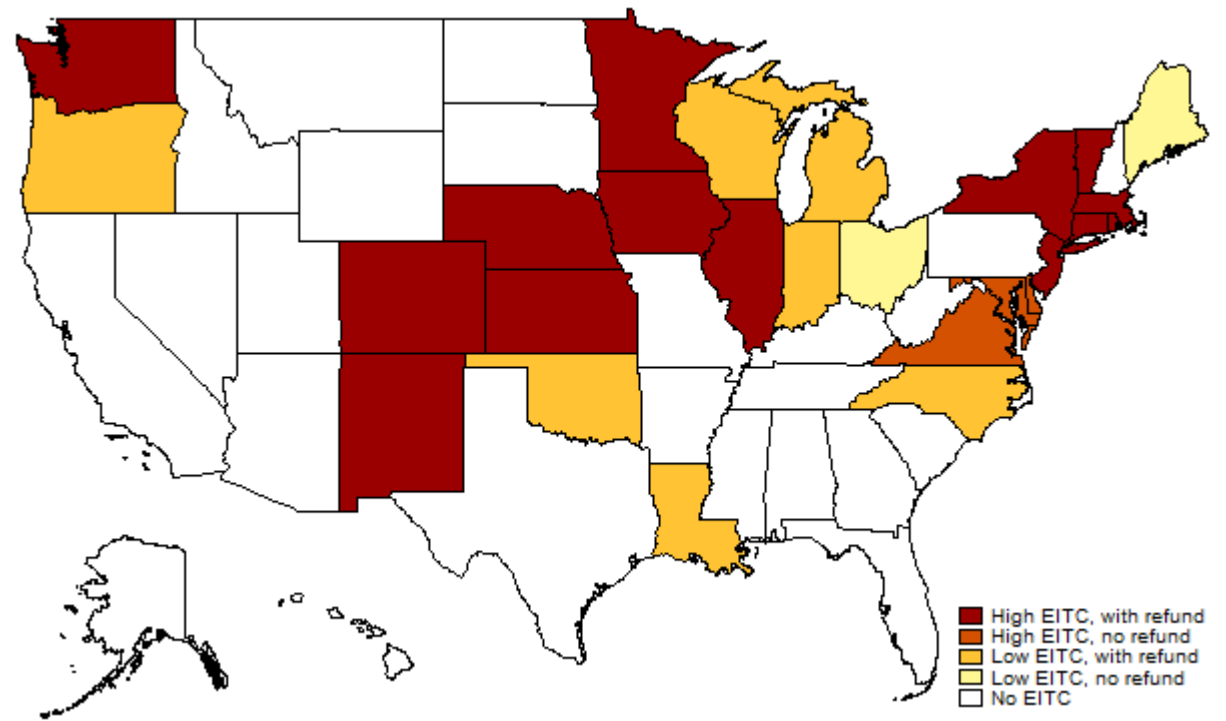
States with <b><u>no EITC</u></b>	States with an EITC, <b><u>nonrefundable</u></b> payments, and payments <b><u>less than 10%</u></b> of the federal amount	States with an EITC, <b><u>refundable</u></b> payments, and payments <b><u>less than 10%</u></b> of the federal amount	States with an EITC, <b><u>nonrefundable</u></b> payments, and payments <b><u>10% or more</u></b> of the federal amount	States with an EITC, <b><u>refundable</u></b> payments, and payments <b><u>10% or more</u></b> of the federal amount
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# Generosity of State EITCs Families with One Child

1994



2013





# Birth Outcome Results

	Dependent Variables		
	Birth Weight in Grams	Birth Weight <2500g	Gestation Weeks
Low EITC No Refund	<b>9.44</b>	<b>-0.003</b>	0.05
Low EITC With Refund	<b>16.85</b>	<b>-0.005</b>	0.03
High EITC No Refund	<b>12.68</b>	<b>-0.003</b>	<b>0.17</b>
High EITC With Refund	<b>27.31</b>	<b>-0.008</b>	<b>0.08</b>

# Quantile Regression Results

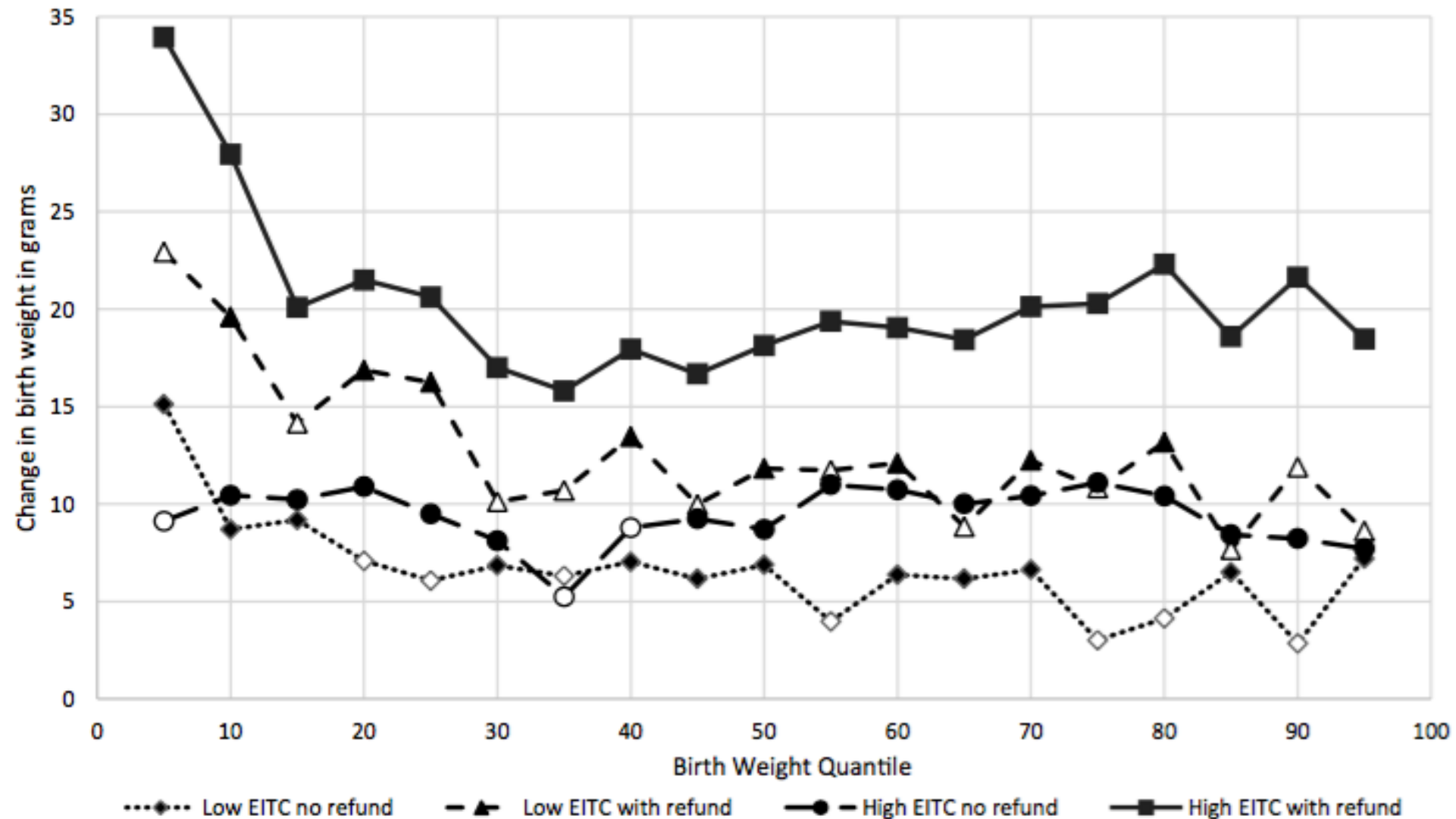


Fig. 2. Effects of EITC Generosity on Birth Weight Using Unconditional Quantile Regression at 5th through 95th Quantiles.

Note: N = 30,780,950. Solid marker indicates point estimate is statistically significant at the 5% level.

# Conclusions

- More generous EITCs associated with reductions in *probability of LBW*
  - 0.3 to 0.8 percentage-point reductions
  - 4% to 11% reductions
  - 4,300 to 11,850 fewer babies born LBW *every year* among women with high school education or less
- If Georgia implemented a refundable EITC at 10% or more of the federal, based on results we estimate
  - 1,047 fewer LBW babies per year in Georgia

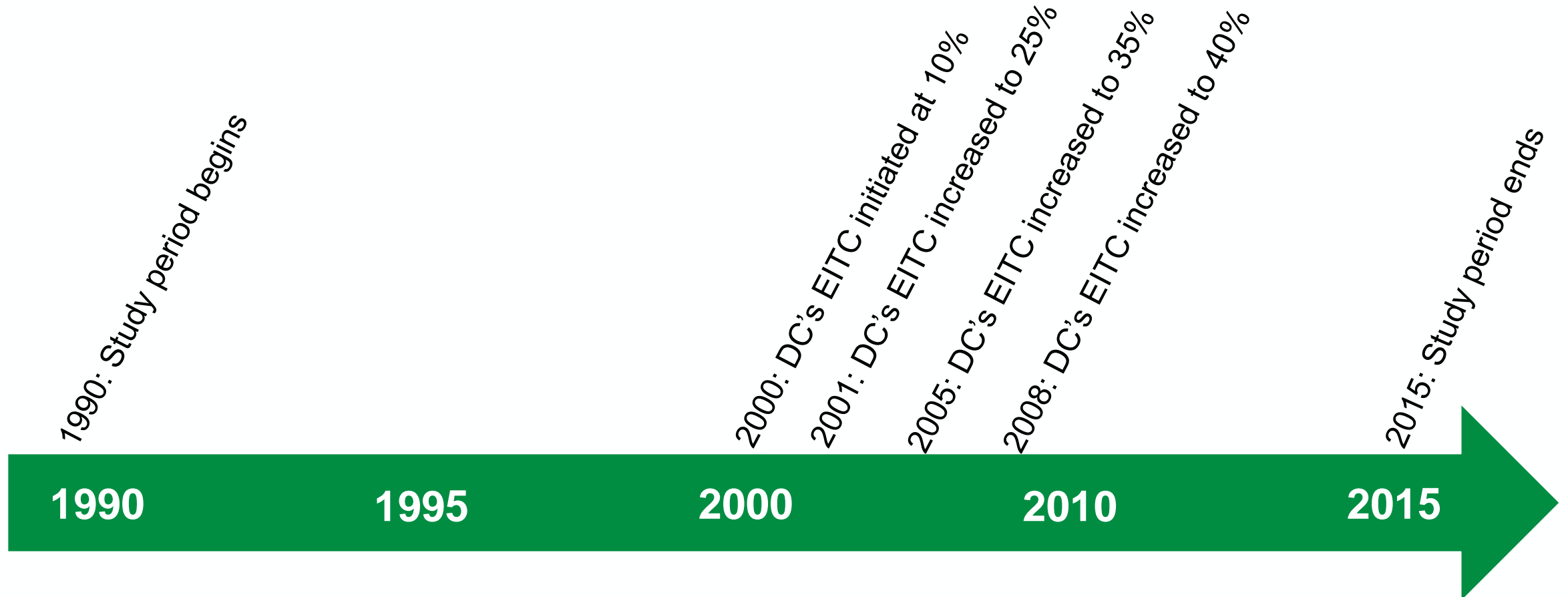
**Effects of Changes in Earned  
Income Tax Credit:  
Time-series Analyses of the  
Experience in Washington DC**

**A.C. Wagenaar, M.D. Livingston,  
S. Markowitz & K.A. Komro**

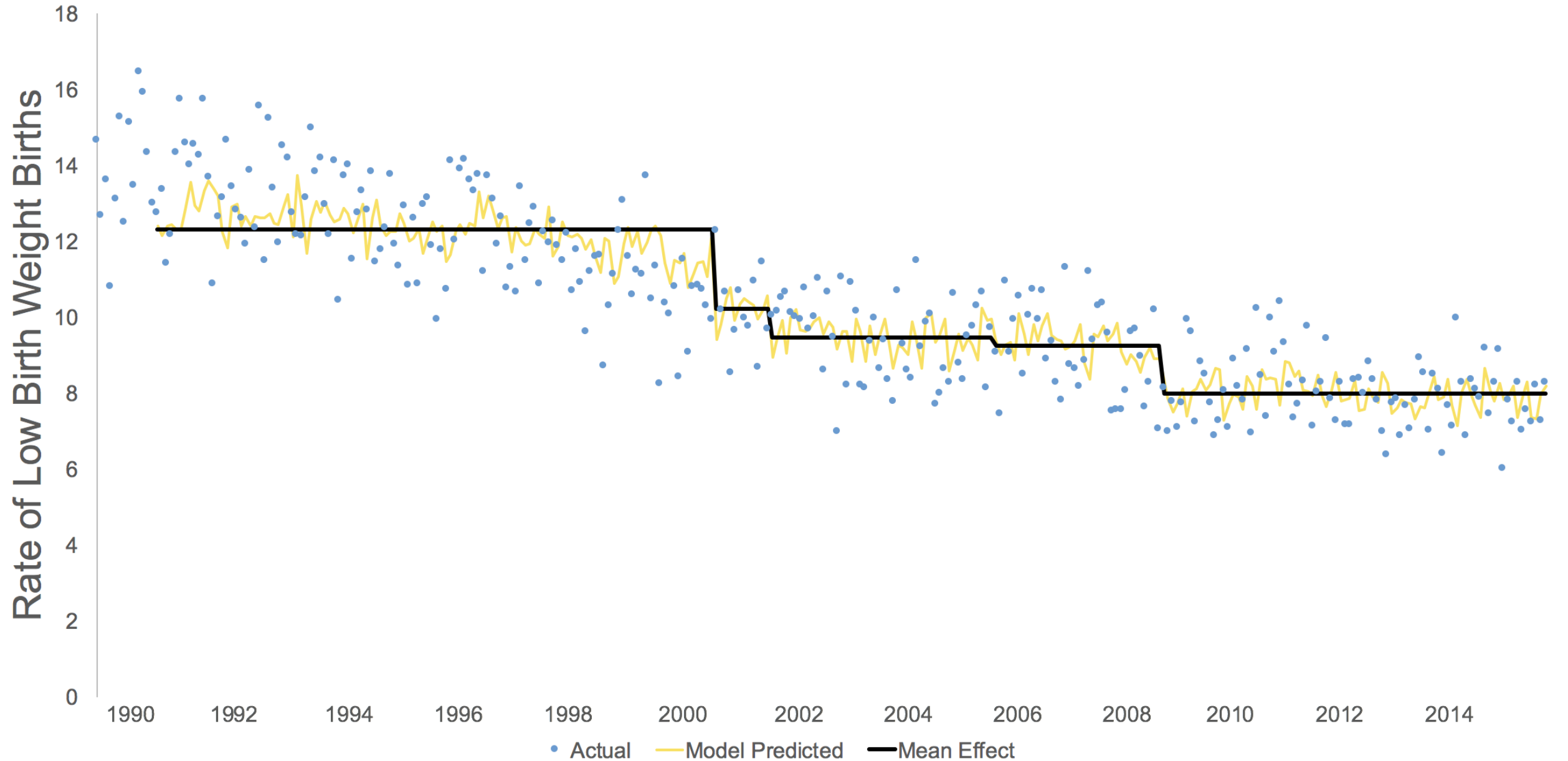
Under review

# EITC in DC

- Four distinct policy changes over 8 year period
- Percentage of the federal EITC, fully refundable



# Effects of EITC on Low Birth Weight





## **Bottom Line: Effects in DC**

- 40% tax credit → 40% decrease in low birth weight births from baseline
- Prevents an estimated 349 low-weight births per year in DC

# **Effects of State-level Earned Income Tax Credit Laws on Birth Outcomes by Race and Ethnicity**

**K.A. Komro, S. Markowitz & M.D.  
Livingston, A.C. Wagenaar,**

Under review

# Health Inequities

- Health inequities in birth outcomes by mother's income, education level and race
  - Percent low birth weight births (2016)
    - Hispanic women: 7% to 9.5%
    - non-Hispanic white women: 7%
    - non-Hispanic black women: nearly 14%
- Caused by a complex set of social factors across the life course
  - income inequality
  - education achievement gaps
  - residential segregation
  - toxic environment exposures

# Results

- Larger beneficial effect among black mothers compared with white mothers for the probability of low birth weight and gestation weeks
- No significant differences in birth outcomes between Hispanic and white mothers

# We're Just Getting Started

- Minimum wage and EITC interactive effects
- Minimum wage and EITC optimum legal constructions
- TANF effects on maternal, infant and child outcomes
- Exploring differential effects by race/ethnicity
- Additional health outcomes
- Additional policies affecting social determinants
- Continued monitoring and coding of legal changes

***Thank You! Kelli***

(kkomro@emory.edu)





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