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State EITC could improve the health of North Carolinians

A state Earned Income Tax Credit is a common-sense solution to address North Carolina's poverty-related public health crisis.

By HEBA ATWA, Budget & Tax Center Policy Advocate

Reinstating North Carolina's Earned Income Tax Credit (EITC) as a refundable credit at the national average of 20 percent of the federal credit has the potential to improve life for the 900,000 North Carolinians who are working for low wages that erect barriers to their economic security and health. The link between poverty and poor health is well established. Generous and fully refundable state-level EITCs, together with their federal counterpart, are associated with improved physical and mental health, maternal and infant health, enhanced nutrition, and community well-being.

- **Maternal and infant health:** Mothers receiving the EITC, or increased EITC payments, reported that they benefitted from improved physical and mental health and decreased depression scores. Babies in families receiving EITC have higher birth weights. Each year, 361 more North Carolina babies would be born at regular birth weights and would be able to live out healthier lives if the state had an EITC of just 10 percent of the federal credit.
- **Nutrition and community well-being:** Receiving EITC is associated with the purchase and consumption of more food and healthier food. The EITC also has been shown to deliver a compounded benefit on health in neighborhoods where large numbers of recipients live in close proximity.
- **Mental and physical health:** Receiving EITC is linked to self-reports of improved health among children and heads of households, as well as

Reinstating North Carolina's EITC ... has the potential to improve life for the 900,000 North Carolinians who are working for low wages.

a decrease in risky biomarkers and depression scores. An EITC set at 10 percent of the federal credit has the potential to save the lives of North Carolinians, as a result of the credit's association with the reduction of so-called “deaths of despair” suicides.

North Carolina's EITC made up only a small portion of the state budget in 2013, but it improved life for more than 900,000 North Carolinians.¹ Twenty-nine states plus the District of Columbia and Puerto Rico currently have state-level EITCs that augment the benefits of the federal EITC in reducing poverty and improving health. However, North Carolina is not one of those states. In fact, North Carolina is the only state to have ever eliminated its EITC and undone its positive impact on residents' health.²

Living in poverty is a strong determinant of poor health

Financial stability is foundational to good health. Living in poverty is a strong indicator of both immediate and lifelong poor health outcomes. The EITC is one of the most effective federal policy tools in combating income poverty and its associated negative effects. As it relates to health, the tax credit has the potential to improve infant health and reduce low birth weight and associated infant mortality, to increase access to healthy food and health-promoting environments, to mitigate the rate and impact of chronic disease through increased access to health-promoting factors like nutritious food and insurance uptake, and to reduce toxic stress and its unhealthy associated behaviors and physiological impacts. The relationship between poverty and health is even more pronounced for Black people who, as a result of persistent institutional and structural racism, have lower incomes and shorter life expectancies than their white counterparts.³

Income poverty — the experience of lacking adequate income to meet one's basic needs⁴ — has a significantly detrimental impact on both the immediate and lifelong physical and mental health of children and families.⁵ Children who experience poverty between their prenatal and fifth year of life are more than twice as likely as their more financially secure peers to report poor health in adulthood.⁶ The adverse consequences of poverty persist throughout life for children living in deep poverty. Even early childhood and prenatal poverty are linked to adult health outcomes manifesting as late as an individual's fourth decade of life.⁷

1 North Carolina Department of Revenue (2013). Biennial Tax Report. <https://www.ncdor.gov/reports-and-statistics/biennial-tax-expenditure-report>; Mitchel, T. (2014). First in Flight from the EITC, North Carolina Justice Center, Budget & Tax Center. <https://www.ncjustice.org/wp-content/uploads/2018/12/BTC-Brief-First-in-Flight-from-the-EITC.pdf>.

2 Center on Budget and Policy Priorities. (2018). <https://www.cbpp.org/twenty-nine-states-dc-and-puerto-rico-have-enacted-eitcs-as-of-2018>; Leachman M. (2014). Unhappy New Year: North Carolina Eliminates Its EITC. Retrieved From: <https://www.cbpp.org/blog/unhappy-new-year-north-carolina-eliminates-its-eitc>.

3 Khullar, D., Chokshi D.A., (2018). Health, Income & Poverty: Where We Are & What Could Help. Health Affairs, Health Policy Brief. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hpb20180817.901935/full/>.

4 Brooks-Gunn J., Duncan G. J. (1997) The Effects of Poverty on Children. The Future of Children, Jeanne Brooks-Gunn and Greg J. Duncan, The Future of Children, 7(2), 55-71.

5 Braveman P., Egeter S., Robert Wood Johnson Foundation: Overcoming Obstacles to Health, 2008. Retrieved from the Robert Wood Johnson Foundation website: <https://www.rwjf.org/en/library/research/2008/02/overcoming-obstacles-to-health.html>.

6 Duncan Greg J., Magnuson K., (2013) The Long Reach of Early Childhood Poverty. Economic Stress, Human Capital, and Families in Asia 4, 45-70.

7 Ibid

The relationship between income poverty and health is defined by complex, intersectional factors such as lack of access to a health-promoting environment, heightened exposure to toxic stress, and reduced access to nutritious food and safe areas for exercise that impact both physical and mental health. In addition, people living in poverty are less likely to be insured and have less access to high quality medical care that takes advantage of the latest advances in pharmaceutical treatment and medical technology.⁸ The tangible impacts of income poverty are exacerbated by the psychological toll that financial insecurity has on parental mental health, thereby reducing a parent's ability to have healthy, beneficial interactions with their young children.⁹

The relationship between poverty and health is especially evident in the United States, which has one of the largest income-based health disparities in the world.¹⁰ In the U.S., wealth is increasingly concentrated at the top, driving higher rates of economic inequality. In 2013, families in the top 10 percent of wealth distribution held 76 percent of all family wealth at an average of \$4 million, while families at the bottom half of the distribution held just 1 percent of all family wealth and an average of \$13,000 in debt.¹¹ When compared to other Western industrialized countries, the rate of deep child poverty in the U.S., measured at 15 percent of median disposable income, is more than half again as high; Poland is the only country that fares worse.¹²



The link between poverty and health is a self-perpetuating cycle. Income poverty itself increases the odds of negative physical and behavioral health outcomes for individuals in the form of disease and early death. In turn, the costs, lost wages, and lack of economic opportunity associated with poor health also trap individuals in poverty, thus subjecting children to the same poverty in which their parents grew up. Poverty's impact on health is not vague or tangential; living in poverty is a contributing factor to shorter life spans. U.S. men living at or under the poverty level can expect to die eight years sooner than their counterparts living above 400 percent of the poverty level, while poor women can

8 Braveman P., Egeter S., Robert Wood Johnson Foundation: Overcoming Obstacles to Health, 2008. Retrieved from the Robert Wood Johnson Foundation website: <https://www.rwjf.org/en/library/research/2008/02/overcoming-obstacles-to-health.html>.

9 Duncan Greg J., Magnuson K., (2013) The Long Reach of Early Childhood Poverty. Economic Stress, Human Capital, and Families in Asia 4, 45-70.

10 Braveman P., Egeter S., Robert Wood Johnson Foundation: Overcoming Obstacles to Health, 2008. Retrieved from the Robert Wood Johnson Foundation website: <https://www.rwjf.org/en/library/research/2008/02/overcoming-obstacles-to-health.html>.

11 Congressional Budget Office, Trends in Family Wealth (1989-2013). <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51846-familywealth.pdf>

12 Duncan Greg J., Magnuson K., (2013) The Long Reach of Early Childhood Poverty. Economic Stress, Human Capital, and Families in Asia 4, 45-70.

expect to die more than six years before women living above 400 percent of the poverty level. Poor adults are almost five times as likely to be in poor or only fair health as those with high incomes.¹³ Children in the poorest 20 percent of urban populations are twice as likely as children in the richest 20 percent of urban populations to die before their first birthday.¹⁴ Thus, it is morally imperative that we enact policy solutions that mitigate the destructive health impacts of poverty for the 43 percent of North Carolina children currently living in poor or low-income households.¹⁵

Experiencing poverty triggers a lingering physiological response

Preventing or mitigating an individual's experience of poverty during childhood is paramount to lifelong health, as the experience of child poverty has the potential to interfere with health and wellness throughout one's life, well into adulthood.

The health implications of poverty are multifaceted. Exposure to the unsafe environments, neighborhoods, and living conditions associated with a lack of financial resources may have a direct and immediate impact on the health of parents and children. In addition, the lack of adequate income that prevents access to basic needs like nutrition and safe housing can cause both parents and children to experience “toxic stress.”

Increased levels of stress hormones such as corticotropin, cortisol, norepinephrine, and adrenaline are the hallmarks of the human response to stress. Occasional increases in these hormones are appropriate and necessary for human survival. However, extremely elevated levels or a prolonged stress response are toxic for the human body — literally resulting in wear and tear on the body's vital organs, including the brain. The burden of this toxic stress response on the body is referred to as “allostatic load.”¹⁶ Chronic poverty in early childhood is linked to allostatic load and results in inappropriate activation and/or suppression of the initiation of the stress response. This and associated physiological responses have implications for both physical and mental health throughout the course of a person's life and are linked to risk behaviors like promiscuity, overeating, and substance abuse that may help an individual feel a relief from the stress response in the short term but that often lead to poor health and early mortality.¹⁷

The theory of toxic stress was tested on a group of families and their children in the eastern part of North Carolina. The study tested the cortisol levels of children experiencing poverty. The results demonstrated that elevated cortisol levels were significantly related to the time a child had spent living in poverty, with older children exhibiting muted cardiovascular response. This corroborates the findings of a British study that found a link between adult chronic inflammation such as arthritis and

13 Braveman P., Egeter S., Robert Wood Johnson Foundation: Overcoming Obstacles to Health, 2008. Retrieved from the Robert Wood Johnson Foundation website: <https://www.rwjf.org/en/library/research/2008/02/overcoming-obstacles-to-health.html>.

14 Pascoe J.M., Wood D. L., Duffee J. H., Kuo A., The American Association of Pediatrics: Mediators and Adverse Effects of Child Poverty in the United States, 2016. Retrieved from the American Association of Pediatrics website: <https://pediatrics.aappublications.org/content/pediatrics/137/4/e20160340.full.pdf>

15 NC Child (2019). Child Health Report Card. https://www.ncchild.org/wp-content/uploads/2019/02/2018-NCreportcard-FINAL_low.pdf

16 Ibid

17 Ibid

hypertension with the experience of childhood poverty.¹⁸

Income poverty also has an impact on preventive health behaviors and on the incidence and management of chronic conditions. One reason is the rate of food insecurity — defined as limited or uncertain access to nutritionally adequate and safe foods — among children living in poverty. Children who live in food-insecure households experience increased incidence of sickness, recover from illness more slowly, and are hospitalized more frequently.¹⁹ Perhaps because nutritious foods are not as accessible or as inexpensive as shelf-stable, calorie-dense foods that are high in sugar and fat, poor children suffer from the seeming contradiction of elevated rates of both hunger and obesity.

While children comprise 22.7 percent of the total U.S. population, they account for more than 32 percent of the individuals living in poverty.²⁰ Children who live in poverty, as well as those children who live below the poverty line for multiple years, suffer the worst consequences of income poverty. While the pathways through which poverty inflicts negative outcomes are complex, randomized trials indicate that income poverty in and of itself causes harm, with the most pronounced impacts for those living in extreme poverty.²¹ Research suggests that intervention during a child's early years may be the most effective at reducing the negative impact of poverty on a child.

The EITC is a proven, effective anti-poverty policy

The EITC lifted 5.7 million people out of poverty in 2017; over half of them were children.²² The program is credited with keeping more children out of poverty than any other tax credit program.²³ A universal, state-level refundable EITC at 50 percent of the federal rate has the potential to lift an additional 1.1 million children across the country out of poverty.²⁴

Enacted in 1975 and continued with consistent bipartisan support, the EITC is a refundable federal tax credit considered to be the most effective anti-poverty tax policy currently in practice.²⁵ Available to eligible workers who meet income and family-size requirements, the refundable credit either offsets the amount of tax dollars owed by relatively low wage earners or returns dollars earned to those eligible workers with no tax liability. According to recent estimates, over 20 percent of individuals living in

18 Ibid

19 Food Research and Action Center. (2017). The Impact of Poverty, Food Insecurity, and Poor Nutrition on Health and Well-Being, 2017. Retrieved from Food Research and Action website: <http://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurity-health-well-being.pdf>

20 Fontenot K., Semega J., Kollar M. Current Population Reports, Income and poverty in the United States: 2017. (Report Number P60-263). Retrieved from the U. S. Census Bureau website: <https://www.census.gov/library/publications/2018/demo/p60-263.html>

21 Brooks-Gunn J., Duncan G. J. (1997) The Effects of Poverty on Children. The Future of Children, Jeanne Brooks-Gunn and Greg J. Duncan, The Future of Children, 7(2), 55-71.

22 Waxman S., Williams E. Center on Budget and Policy Priorities. How much would a state Earned Income Tax Credit Cost in Fiscal Year 2020?

23 Center on Budget and Policy Priorities. (2019). How much would a state Earned Income Tax Credit Cost in Fiscal Year 2020? <https://www.cbpp.org/research/state-budget-and-tax/how-much-would-a-state-earned-income-tax-credit-cost-in-fiscal-year>

24 National Center for Children in Poverty (2001). Untapped Potential: State Earned Income Credits and Child Poverty Reduction, Childhood Poverty Research Brief No. 3.

25 Tax Policy Center. (2018). https://www.taxpolicycenter.org/sites/default/files/briefing-book/taxes_and_the_poor.pdf

poverty are workers aged 18-64 — precisely the targeted recipients of EITC.²⁶ In 2015, an estimated 70 percent of all EITC dollars were claimed by unmarried tax filers (head of household and single filing statuses) with most (60 percent of all EITC dollars) claimed by those filing as head of household, indicating substantial use by single mothers.²⁷

Eligible North Carolinians receive an average of \$2,546 annually in federal EITC benefits.²⁸ Therefore, a state EITC set at 20 percent of the federal credit, approximately the national average, would mean an extra \$500 dollars annually for working families in our state. At a more modest 10 percent of the federal credit, North Carolina families would receive approximately a \$250 boost to their incomes from a state EITC. While modest, this additional income can improve a family's ability to afford food, medicine, child care, car repairs, or a transition to stable housing.

EITC boosts income and health outcomes

Substantial research indicates that the EITC has positive implications for the educational success, future economic status, and the health and well-being of children in households claiming the tax credit. Although the EITC was explicitly designed to improve the living conditions of families who receive the tax credit, only recently have researchers begun to focus their studies on the impact of the EITC on the health of both parents and children in households that claim the tax credit.

EITC linked with positive health outcomes throughout life

A meaningful body of research indicates that the EITC has the potential for positive benefits throughout the life of a child who would otherwise be born into and raised in poverty. As an anti-poverty tool, the Earned Income Tax Credit has the potential to positively impact prenatal and birth outcomes, to mitigate the rates and effects of chronic disease, and to prevent premature death.

EITC improves health and well-being

Research indicates a positive association between EITC and improvements in both physical and mental well-being. Research has found that mothers and heads of household report an increase in very good or excellent physical health and increased happiness and self-worth after receiving EITC, and the depression scores of mothers decrease with receiving EITC.²⁹ Children also self-report improved health.³⁰

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- 26 Fontenot K., Semega J., Kollar M. Current Population Reports, Income and poverty in the United States: 2017. (Report Number P60-263). Retrieved from the U.S. Census Bureau website: <https://www.census.gov/library/publications/2018/demo/p60-263.html>
- 27 The Congressional Research Service. (2018). The Earned Income Tax Credit (EITC): An overview. <https://crsreports.congress.gov/product/pdf/R/R43805>.
- 28 Internal Revenue Service, Statistics for Tax Returns with EITC (2019). <https://www.eitc.irs.gov/eitc-central/statistics-for-tax-returns-with-eitc/statistics-for-tax-returns-with-eitc>.
- 29 Lenhart, O. (2016). The earned income tax credit, mental health, and happiness. *Journal of Economic Behavior & Organization*, 126, Part A.
- 30 Garthwaite, C., Evans W. (2014) Giving Mom a Break: The Impact of Higher EITC Payments on Maternal Health, , *American Economic Journal: Economic Policy*, 6(2), 258-290.

The increase in self-reports of improved physical health associated with higher EITC payments may be attributed to higher rates of private insurance uptake and increased food spending and the associated food security. Research has indicated that EITC receipt is associated with the increased consumption of healthier fresh foods and the decreased consumption of more processed foods.³¹ EITC is also associated with increased spending on food consumed at home, indicating a potential increase in the purchase of more expensive, nutritionally dense food and the abstention from less expensive, processed foods that are low in nutrition but high in calories.³² Food insecurity is associated with chronic morbidity like diabetes and hypertension.³³ In North Carolina, 1 in 7 people in our state struggles with hunger, while 1 in 5 children struggles with hunger.³⁴

Expansion of the EITC was linked to a decrease in the biological markers associated with inflammation, a potential indicator of underlying poor health.³⁵ The association between poverty, health, and this toxic stress is visible using a combined measure of these biomarkers, or health indicators, associated with health issues like heart disease, stroke, kidney failure, and diabetes. A study of women with multiple children and a high school degree or less found that expansion of the EITC reduced the count of these risky health indicators, especially those associated with inflammation and high blood pressure.³⁶

EITC associated with improved birth weight for babies in recipient families

Some of the most pronounced positive health impacts of the EITC are related to infant health and birth outcomes, including improved birth weight and longer pregnancies.³⁷ Low birth weight is a crucial measure of infant health because it is so closely associated with infant mortality and is predictive of negative health outcomes throughout life.³⁸ The incidence of low birth weight, associated with both first-year infant mortality risk and the development of disease in adulthood, is elevated in poorer neighborhoods.³⁹ Several studies have found larger EITC payments are associated with higher birth weights. Research indicates that financial hardship is associated with stress, suggesting

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- 31 McGranahan, L., Schanzenbach, D. W. (2013). The Earned Income Tax Credit and food consumption patterns. Federal Reserve Bank of Chicago Working Paper 2013–2014. Retrieved from Federal Reserve Bank of Chicago website: <https://www.chicagofed.org/publications/working-papers/2013/wp-14>
 - 32 Lenhart, O. (2019). The Effects of Income on Health: New Evidence From The Earned Income Tax Credit. *Review of Economics of the Household* 17 (2) 377-410.
 - 33 Seligman H.K., Laraia B.A., Kushel M.B. (2010) Food Insecurity Is Associated with Chronic Disease among Low-Income NHANES Participants, *The Journal of Nutrition*, 140 (2), 304–310.
 - 34 Feeding America, *Hunger in North Carolina Statistics* (2019). <https://www.feedingamerica.org/hunger-in-america/north-carolina>
 - 35 Garthwaite, C., Evans W. (2014) Giving Mom a Break: The Impact of Higher EITC Payments on Maternal Health, *American Economic Journal: Economic Policy*, 6(2), 258-290.
 - 36 Garthwaite, C., Evans W. (2014) Giving Mom a Break: The Impact of Higher EITC Payments on Maternal Health, *American Economic Journal: Economic Policy*, 6(2), 258-290.
 - 37 Markowitz S., Komro K.A., Livingston M.D., Lenhart, O., Wagenaar, A.C. (2017). "Effects of State-Level Earned Income Tax Credit Laws in the U.S. on Maternal Health Behaviors and Infant Health Outcomes." National Bureau of Economic Research. NBER Working Paper No. 23714. <https://www.nber.org/papers/w23714>
 - 38 Komro, K., Livingston M., Markowitz, S., Wagenaar, A.C., (2016). The Effect of an Increased Minimum Wage on Infant Mortality and Birth Weight. *American Journal of Public Health*, 106(8), 1514–1516.
 - 39 Pascoe J.M., Wood D. L., Duffee J. H., Kuo A., The American Association of Pediatrics: Mediators and Adverse Effects of Child Poverty in the United States, 2016. Retrieved from the American Association of Pediatrics website: <https://pediatrics.aappublications.org/content/pediatrics/137/4/e20160340.full.pdf>

that alleviating maternal stress may be the pathway through which the EITC acts.⁴⁰ The most pronounced of these improvements are seen in states with more generous EITCs.⁴¹ Each 10 percentage point increase in EITC penetration is associated with a reduction of 23.2 per 100,000 in the infant mortality rate. A 100 percent rate of EITC penetration also could significantly speed up this reduction.⁴²

In addition to income poverty, low birth weight is correlated with race and lower educational attainment. Given that Black Americans are more than twice as likely as the white population to live in poverty, it is not surprising that low birth weight is especially prevalent among infants born to Black mothers.⁴³ In fact, Black women have almost double the risk of having an infant with a low birth weight.⁴⁴



A substantial body of literature indicates that the EITC has an especially significant impact on birth weight for Black mothers who make low incomes and who have a high school education or less.⁴⁵ A national study of EITC impact on birth weight found that, in states with the highest refundable EITCs, white and Black mothers had about 12 percent fewer babies with low birth weights. The absence of similar results across studies for Hispanic/Latina mothers is attributed to statistically higher baseline birth weights among this population and the ineligibility of undocumented mothers to claim the EITC.⁴⁶

As little as a \$1,000 annual increase in after-tax income for EITC-eligible families has been shown to have a significant impact on birth weight. Subsequent infants born to mothers who are defined as high risk, i.e., statistically inclined to have low birth-weight babies, demonstrated a 1.6 percent to 2.9 percent decline in low birth-weight status when they received \$1,000 in after-tax income, with an even more pronounced impact on births to high risk Black mothers.⁴⁷ These impacts appear to be even more pronounced

40 Hamad, R., Rehkopf, D.H. (2015). Poverty, Pregnancy, and Birth Outcomes: A Study of the Earned Income Tax Credit, *Paediatric and Perinatal Epidemiology* (29) 5, 444-452.

41 Komro K.A., Markowitz S., Livingston M.D., Wagenaar A.C. (2019). Effects of State-Level Earned Income Tax Credit Laws on Birth Outcomes by Race and Ethnicity, *Health Equity*, (3)1.

42 Arno, P., Sohler, N., Viola, D., Schechter C. (2009) et al., Bringing Health and Social Policy Together: The Case of the Earned Income Tax Credit, *Journal of Public Health Policy* (30)198.

43 Komro K.A., Markowitz S., Livingston M.D., Wagenaar A.C. (2019). Effects of State-Level Earned Income Tax Credit Laws on Birth Outcomes by Race and Ethnicity, *Health Equity*, (3)1.

44 Ibid.

45 Ibid

46 Ibid

47 Hoynes, H. Miller, D. Simon, D. (2015). Income, the Earned Income Tax Credit, and Infant Health, *American Economic Journal: Economic Policy* 7(1), 172-211.

when tested in neighborhoods with a high proportion of EITC-eligible households.⁴⁸

N.C. could make progress on addressing poverty, improving health with a state EITC

The expansion and state-level adoption of highly successful working-family tax credits like the Earned Income Tax Credit provide a decidedly effective and consistently proven tool to improve the health and well-being of children and families living in poverty.

Twenty-four percent of North Carolina's families with children are considered low income and working, while more than 36 percent of families with children are single-parent households.⁴⁹ These are precisely the populations who are eligible to claim the EITC and who tend to benefit the most from the EITC. A total of 43 percent of North Carolina's children live in poor or low-income homes. As a result of a history of systemic and structural racism and inequity in our state, 64 percent of Black children live in poor households.⁵⁰ Simultaneously, such poverty-reducing and health-promoting tax policies as the EITC are fundamental to addressing the serious public health issue that poverty represents in North Carolina.

The expansion and state-level adoption of highly successful working-family tax credits ... provide a decidedly effective and consistently proven tool to improve the health and well-being of children and families living in poverty.

EITC would improve health of babies born in North Carolina

In North Carolina, 1 in 10 babies born annually is considered to have a low birth weight, with approximately 900 dying before their first birthday each year.⁵¹ Unfortunately, that rate has persisted over the past decade.⁵² There is a strong correlation between low birth weight and the mother's education. In 2017, the latest year for which there is data, there were 4,979 births to North Carolina women with a high school degree or less education.⁵³ According to research, North Carolina would see a reduction of 361 babies annually born with low birth weights to that maternal group alone with the reinstatement of a state-level EITC set at 10 percent of the federal credit or above.⁵⁴

48 Wicks-Lim, J., Arno, P. (2017) Improving population health by reducing poverty: New York's Earned Income Tax Credit, SSM Population Health Population Health (3), 373-381.

49 Kids Count Data, North Carolina (2017). <https://www.ncchild.org/what-we-do/data/kids-count-data-center/>; <https://www.ncchild.org/what-we-do/data/kids-count-data-center/>.

50 NC Child, Child Health Report Card. https://www.ncchild.org/wp-content/uploads/2019/02/2018-NCreportcard-FINAL_low.pdf

51 North Carolina Justice Center, Budget & Tax Center, State of Health Infographic. <https://www.ncjustice.org/wp-content/uploads/2019/04/STATE-OF-HEALTH-in-NC-infogrpk-BABIES.pdf>

52 Ibid.

53 NCDHHS, North Carolina Center for Health Statistics, (2017). https://schs.dph.ncdhhs.gov/interactive/query/births/bd_2016andlater.cfm.

54 Markowitz S, Komro KA, Livingston MD, Lenhart O, Wagenaar AC. "Effects of state-level Earned Income Tax Credit laws in the U.S. on maternal health behaviors and infant health outcomes." Social Science and Medicine, 2017; 194, 67-75. 8 Estimates for improvement in birth weight for North Carolina were generated by author S. Markowitz of the study, using data from the Center for Disease Control and Prevention Wonder Tool. <https://wonder.cdc.gov/nativity-expanded-current.html>.

There are clear disparities along racial lines related to infant mortality. For each white infant who dies per thousand births, there are nearly three African American or Black infants who die. While rates of infant mortality for Hispanic or Latinx infants have historically been closer to those for white babies, in North Carolina, the rate is 1.2 deaths per 1 white infant who dies. If the racial disparity gap were closed, 238 fewer African American or Black infants, and 19 fewer Hispanic or Latinx infants would die each year.⁵⁵ As mentioned, research has revealed a strong relationship between increased birth weight and EITC among women with a high school degree or less education.⁵⁶ In 2017, the latest year for which there is data, 4,979 low birth-weight infants were born to North Carolina women with a high school degree or less.⁵⁷ Research shows that on average those states with an EITC set at 10 percent or more of the federal credit see a drop in the low birth-weight rate of nearly 1 percent. In North Carolina, the restoration of the EITC at 10 percent of the federal credit would mean 361 babies being born at a healthy weight per year, avoiding the immediate and lifelong negative health consequences of low birth weight.⁵⁸

A generous and refundable state-level EITC has the potential to assist in closing this racial disparity gap and to reduce the infant-mortality rate across all races and ethnicities in North Carolina.

EITC reduces stress of financial fragility, decreases ‘deaths of despair’

Most recently, receiving EITC has been linked to a decrease in premature deaths by suicide. According to the latest available data, there are 1,521 deaths by suicide in North Carolina each year.⁵⁹

A recent reversal in the historical trend of increased life expectancy in the United States has been attributed to deaths related to alcohol and drug abuse and suicide. These so-called “deaths of despair” have been associated with the stress and despair resulting from stagnant wages, a lack of economic opportunity, and increased economic insecurity among individuals without a college degree. Recent research found that a 10 percent increase in EITC reduces death by suicide among adults with a high school education or less by 5.5 percent, with more pronounced effects for those populations with higher rates of EITC receipt.⁶⁰

55 Khachatryan, S. (2018). Racial and Ethnic Gaps in Infant Mortality Have Grown in North Carolina, North Carolina Justice Center, Budget & Tax Center. <https://www.ncjustice.org/publications/racial-and-ethnic-gaps-in-infant-mortality-have-grown-in-north-carolina/>.

56 Markowitz S, Komro KA, Livingston MD, Lenhart O, Wagenaar AC. “Effects of state-level Earned Income Tax Credit laws in the U.S. on maternal health behaviors and infant health outcomes.” *Social Science and Medicine*, 2017; 194, 67-75. 8 Estimates for improvement in birth weight for Georgia were generated by authors of the study Markowitz, et al using data from the National Center for Health Statistics’ Linked Birth / Infant Death Records database for 2007-2014, accessed at <http://wonder.cdc.gov/lbd-current.htm>.

57 North Carolina Department of Health and Human Services, North Carolina Live Birth Data (2017). Accessed at https://schs.dph.ncdhhs.gov/interactive/query/births/bd_2016andlater.cfm

58 Ibid. Estimates for improvement in birth weight for North Carolina were generated by author of the study, S. Markowitz, using data from the National Center for Health Statistics’ Linked Birth / Infant Death Records database for 2016-18, accessed at <https://wonder.cdc.gov/nativity-expanded-current.html>.

59 Center for Disease Control and Prevention, National Center for Health Statistics, N.C. Leading Causes of Death Data (2017). <https://www.cdc.gov/nchs/pressroom/states/northcarolina/northcarolina.htm>.

60 Dow W. H., Godoy A., Lowenstein C.A., Reich M. (2019). “Can Economic Policies Reduce Deaths of Despair?” National Bureau of Economic Research. NBER Working Paper No. 25787

The impact of EITC on reducing deaths by suicide is even more significant for women, who tend to be more likely to be eligible for EITC. Specifically, the study found that a 10 percent increase in state EITC credits leads to a 7.4 percent reduction in suicide deaths among women.⁶¹ Most recent data shows that 327 North Carolina women died by suicide.⁶² A generous and reasonable reinstatement of the EITC has the potential to help reduce the extreme stress associated with suicide and to save lives in North Carolina.

Recommendation: A generous and refundable EITC will increase well-being for North Carolinians

In order to maximize the health benefits of the EITC and ameliorate poverty and its associated health impacts on families, policymakers should thoughtfully consider the connection between improved health and the EITC when crafting the state-level policy.

Special consideration for working families with young children and for alternative payment structures hold the potential to augment the health-promoting impact of the tax credit itself.

Despite child care often being a necessity for working families, EITC families generally do not qualify for or receive North Carolina's extremely limited subsidies for child care. Offering working families the choice to take the EITC in one lump sum or paid out over several months would allow a family to either use the lump sum for a large, life-changing expense like improved housing or transportation or to use the small boost in monthly budget to increase access to nutritional food or adequate child care. Anecdotally, Volunteer Income Tax Assistance program preparers in North Carolina note that many EITC recipients report using the credit for life-changing transitions such as moving to permanent safe housing. Thus, offering an advance payment of the EITC would allow those families to move into health-promoting housing as soon as possible, rather than waiting until they received their credit. Allowing an advanced EITC payment also has the potential to improve the accessibility of prenatal health care and related resources for pregnant mothers, thus conveying those lifelong benefits to their children.

As one of the most proven and effective anti-poverty programs, a refundable and generous EITC is a common-sense tax policy solution to address North Carolina's poverty-related public health crisis. Reinstating a state-level EITC at the national average of 20 percent of the federal credit has the potential to positively impact the entire life course of EITC recipients and their children who currently live in poverty in our state. It is time to bring back the Earned Income Tax Credit.

61 Dow W. H., Godoy A., Lowenstein C.A, Reich M. (2019). "Can Economic Policies Reduce Deaths of Despair?" National Bureau of Economic Research. NBER Working Paper No. 25787

62 Center for Disease Control and Prevention, CDC Wonder, <https://wonder.cdc.gov/controller/datarequest/D140;jsessionid=B71679CD.F08212E7C62F7FFD611827BC>.