

Indicator Glossary

Child & Family Stability

Children Experiencing Homelessness

2015: 8.4

2019: 8.8

Description: Children

Experiencing Homelessness is captured in two ways. First, point-in-time counts from the department of Housing and Urban Development are used to gather the proportion of the homeless population under 18. Second, we use McKinney Vento data from CMS to gather the percentage of the student

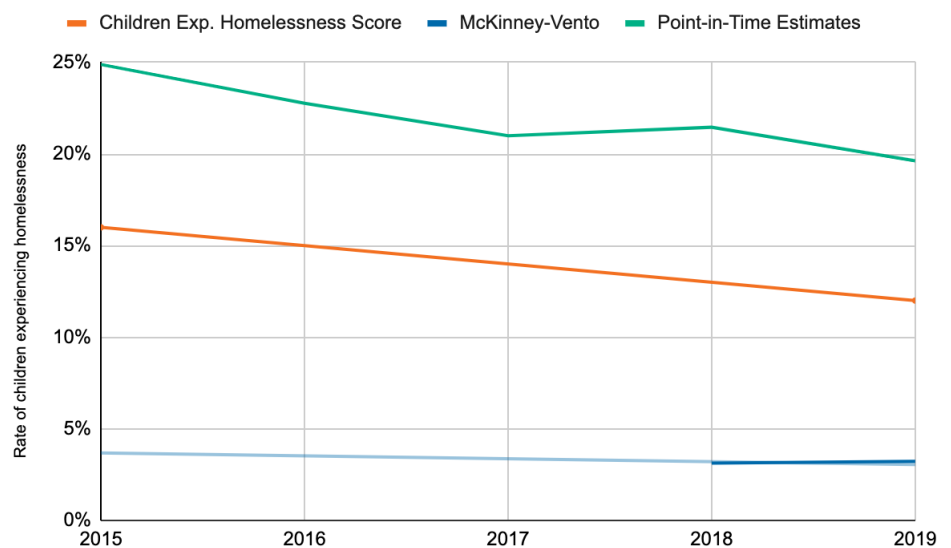
population that experienced homelessness during the academic year. These numbers tell us what proportion of the student body experienced a negative life event that might impact their participation in school and consequently impact their relationship with education for years to come. These two measures are averaged to calculate our indicator.

Data: Though the number of homeless children in Mecklenburg County increased from 2015 to 2019 according to point-in-time measurements, the percentage of homeless children as a fraction of the homeless population overall has decreased. We also see slight decreases in the proportion of the CMS population that experienced homelessness.

Calculation Note: Due to data limitations, point in time data for 2013-2015 were used for our 2015 estimate and data for 2016-2019 were used for our 2019 estimate. McKinney Vento data for academic years ending in 2018-2020 were used to predict estimates based on bivariate linear regression for 2015 and 2019.

Source: CMS [20th Day Enrollment Data](#), CMS [McKinney-Vento Data](#), Department of Housing and Urban Development (HUD)

Data Updates: Annual



Parent Participation in the Labor Force

2015: 9.5

2019: 9.5

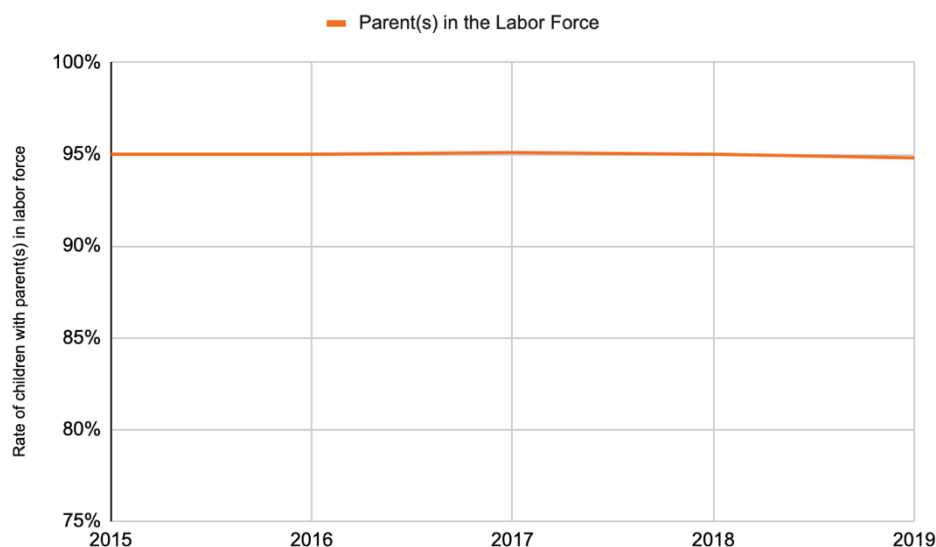
Description: The percentage of children under 18 with at least one parent in the labor force in Mecklenburg County. Participation in the labor force is defined as an individual who is either employed or unemployed and looking for a job. For a single parent household, the parent must meet these criteria to be counted; for a two-parent household, only one parent must fit these criteria to be counted. Because exposure to chronically unemployed parents is associated with adverse employment outcomes in children, this is an important measure for economic mobility within a community.

Data: The percentage of children under 18 with at least one parent in the labor force decreased very slightly from 2015 to 2019, a negative outcome

Calculation Note: Five-year averages reported

Source: U.S. Census Bureau, American Community Survey, Table B23008 via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



Children in Poverty

2015: 7.9

2019: 8.3

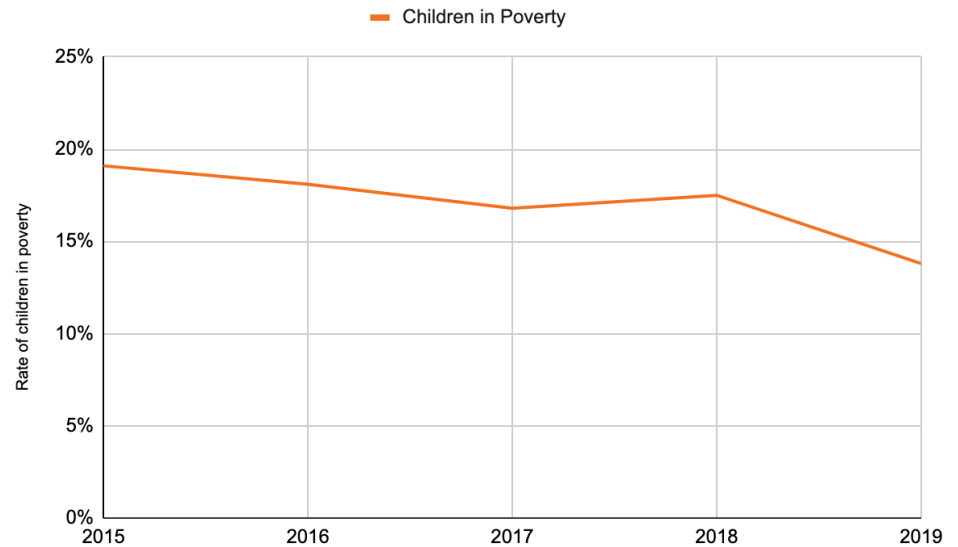
Description: The percentage of children under 18 in Mecklenburg County with (family) incomes below the federal poverty line as defined by HSS.

Data: Both the number and percent of children in poverty have decreased from 2015 to 2019, meaning there are fewer children experiencing poverty and the rate of poverty in children overall is declining.

Calculation Note: Five-year averages reported; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



2-Parent Homes

2015: 6.3

2019: 6.4

Description: The rate of homes in Mecklenburg County with two parents—a frequently used metric to gauge family stability in a community. This number includes married stepparents but might not include cohabiting but unmarried parents because of the question's framing in the American Community Survey.

Note: Children who live in group

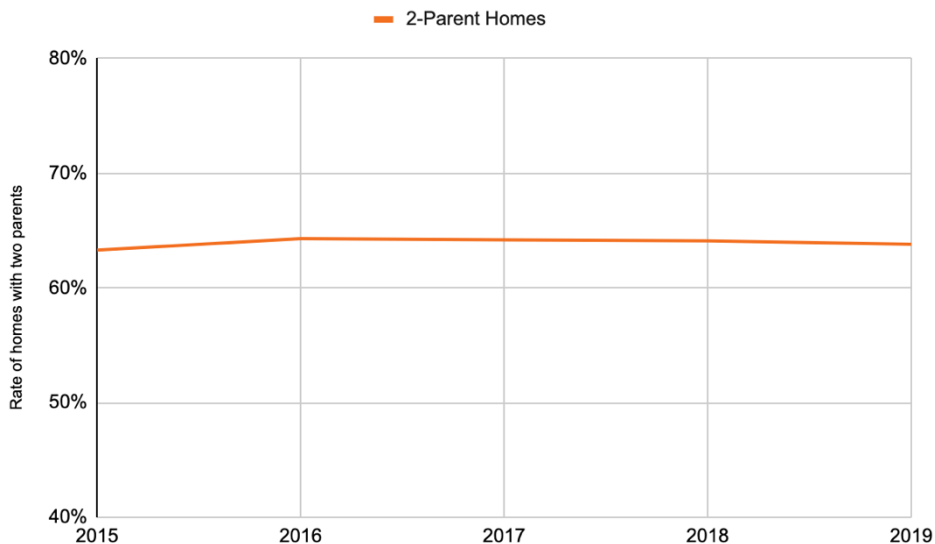
quarters (for example, institutions, dormitories, or group homes) are not included in this calculation

Data: Two-parent homes in Mecklenburg County increased from 2015 to 2019, a positive outcome.

Calculation Note: Five-year averages reported

Source: U.S. Census Bureau, American Community Survey Table B23008 via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



Housing Cost Burden

2015: 7.5

2019: 8.0

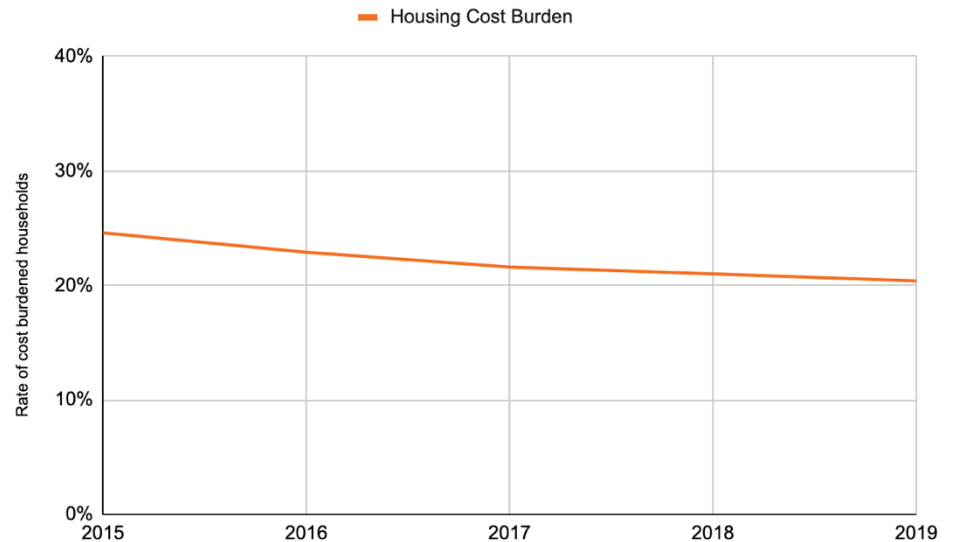
Description: The percent of households in Mecklenburg County that spend 30% or more of their income on housing (rent or mortgage). When families must spend more than 30% of their income on housing, they are much more likely to experience other economic hardships.

Data: The rate of cost burdened households decreased from 2015 to 2019, a positive outcome; continued decreases in this statistic might indicate that Mecklenburg is a county where families are becoming increasingly economically stable

Calculation Note: Five-year averages reported; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: U.S. Census Bureau, American Community Survey Table B25093 via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



Homeownership

2015: 3.6

2019: 3.9

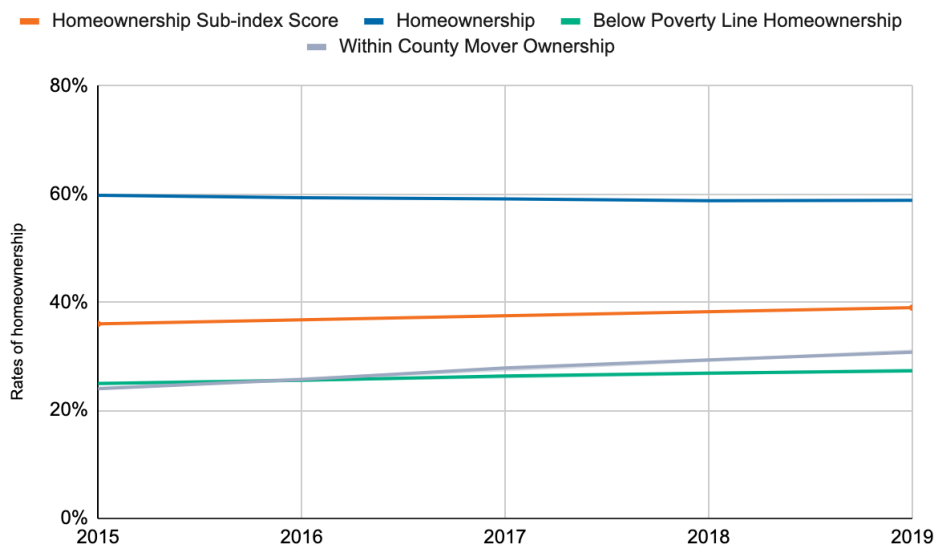
Description: Rates of homeownership are measured for three key groups in this indicator: (i) all Mecklenburg County residents, (ii) residents with incomes below the federal poverty line, and (iii) residents who move within the county—those who continue to call Charlotte-Mecklenburg their home.

Data: Though the rates of homeownership overall decreased from 2015 to 2019, rates increased for two important subgroups of residents. First, the rate of homeownership for people below the poverty line increased. Second, the rate of homeownership for people who move within the county—those who continue to call Charlotte-Mecklenburg their home—increased. Taken together, this tells us that though there have been small declines in homeownership, those who we are most interested in—those under the poverty line and those who continue to build a life in Charlotte-Mecklenburg—are purchasing homes which is contributing to a higher rate of homeownership for the groups that are particularly important to measure in the context of understanding economic mobility.

Calculation Note: Five-year averages reported; Homeownership rates for the county overall, within county movers, and individuals below the poverty line are averaged to produce our indicator

Source: U.S. Census Bureau, American Community Survey, [Table B07013](#)

Data Updates: Annual (one-year lag)



Child Abuse & Neglect

2015: 9.4

2019: 9.3

Description: The child abuse and neglect numbers report the number of children with substantiated abuse and/or neglect cases as a fraction of the exclusive number of children with reported incidents in Mecklenburg County, regardless of how many reports each child has. It is well-documented that lower-income families face a higher level of

reports to authorities regarding suspected child abuse and neglect. This data is important in gauging the proportion of confirmed cases, helping Charlotte-Mecklenburg understand changes in the behavioral and emotional stability of the county's family stability.

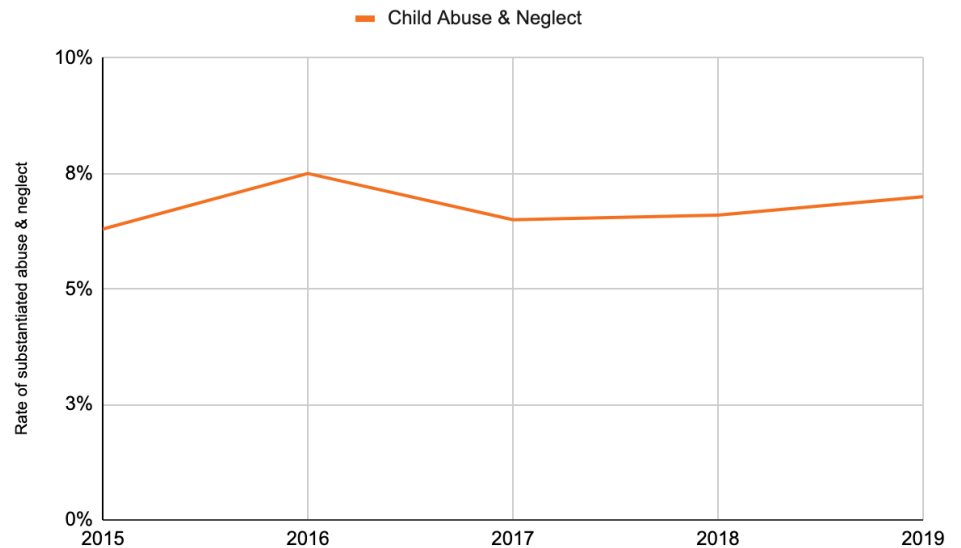
Data: The rate of substantiated abuse and neglect in Mecklenburg County has increased, a negative outcome

Note: Substantiated abuse and neglect definitions can be found at [Kids Count Data Center](#)

Calculation Note: Five-year averages reported; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: Jordan Institute for Families Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



Low Birth Weight

2015: 9.1

2019: 9.0

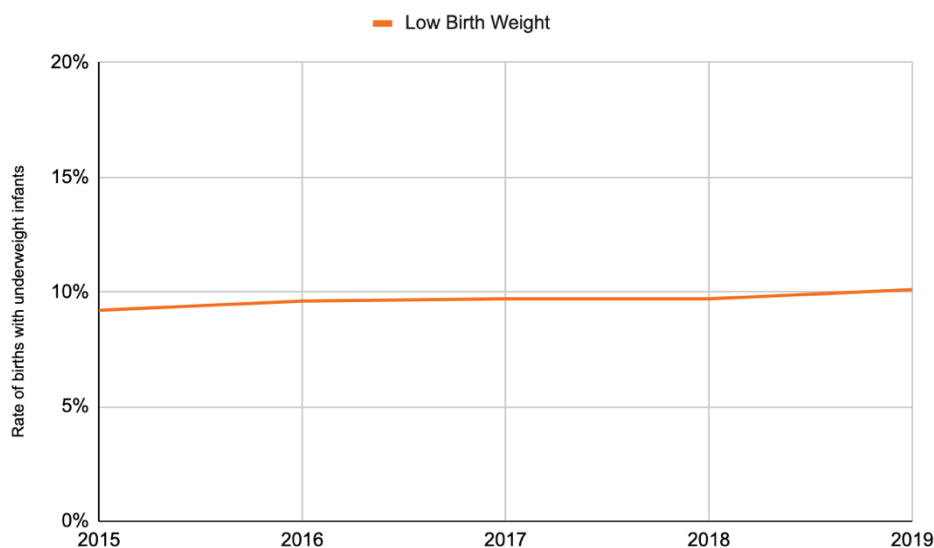
Description: The proportion of births with underweight infants in Mecklenburg County. This indicator is a potential measure for various community level measurements including access to prenatal care and other social determinants of health.

Data: The proportion of births with underweight infants has increased slightly from 2015 to 2019, a negative outcome.

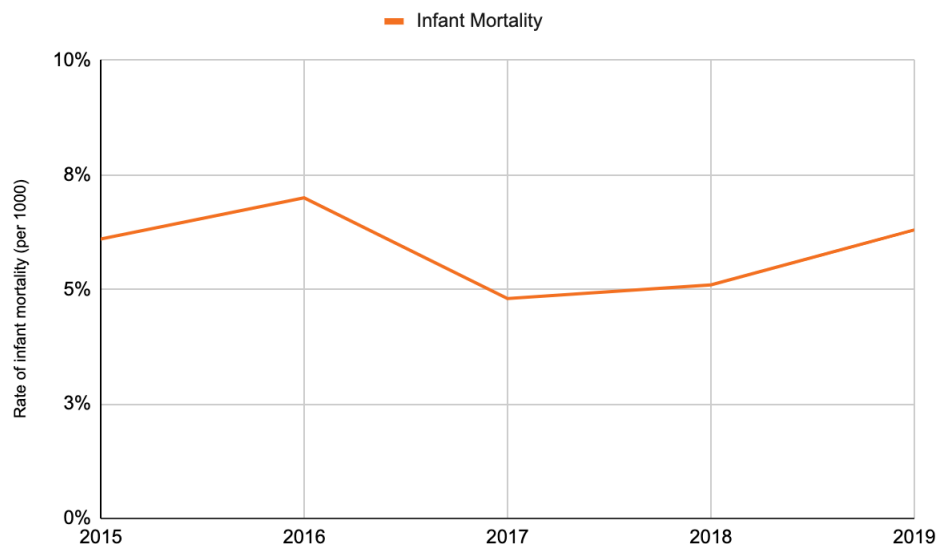
Calculation Note: Five-year averages reported; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: North Carolina Department of Health and Human Services, State Center for Health Statistics: North Carolina Live Birth Data, via [Kids Count Data Center](#)

Data Updates: Irregular



Infant Mortality



2015: 9.4

2019: 9.4

Description: The rates of infant mortality (death before age one) observed in Mecklenburg County. This indicator is considered an important measure of maternal healthcare in a community, relating closely to various social indicators of health.

Data: Very small increases in the rates of infant mortality were observed in Mecklenburg County from 2015 to 2019, a negative outcome.

Calculation Note: Five-year averages reported; Rate per 1000 live births; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: North Carolina Department of Health and Human Services, State Center for Health Statistics: North Carolina Infant Mortality Report, Table 1 via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)

Teen Pregnancy

2015: 6.6

2019: 7.2

Description: Pregnancy in teens age 15-17 as a fraction of total pregnancies in Mecklenburg County. This is one of the most marked improvements across all indicators and categories. A reduction in the rate of teen pregnancies can indicate that (i) teens are engaging in safer sex practices and (ii) a higher proportion of families are

forming at a time in parents' lives when they are more equipped to provide their children with a stable home.

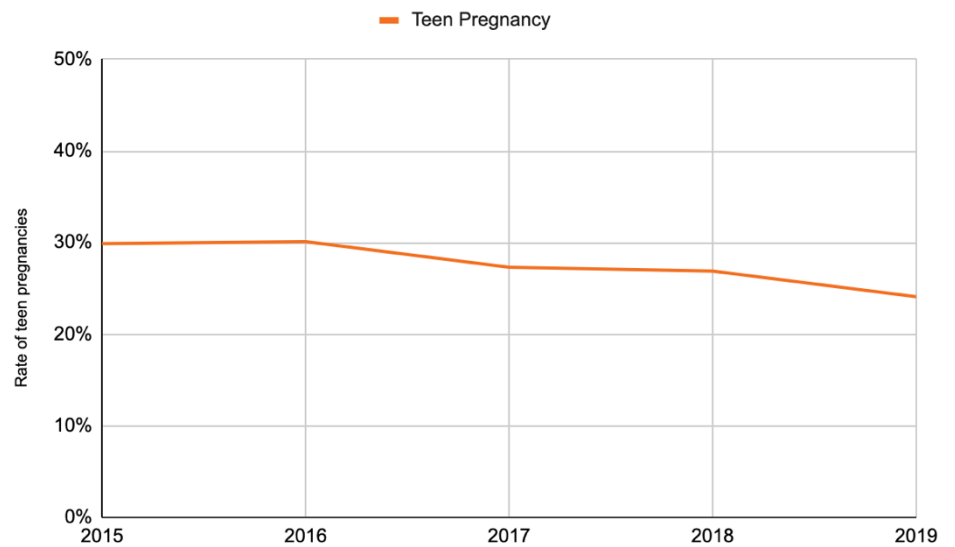
Data: The rate of teen pregnancy decreased from 2015 to 2019, a positive outcome.

Notes: Reported statistics include live births, induced abortions, and fetal deaths after 20 weeks. Spontaneous abortions (miscarriages) before 20 weeks are not reported to the state.

Calculation Note: Five-year averages reported; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: U.S. Census Bureau, American Community Survey Table B23008 via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



Access to Family Planning

2015: 7.4

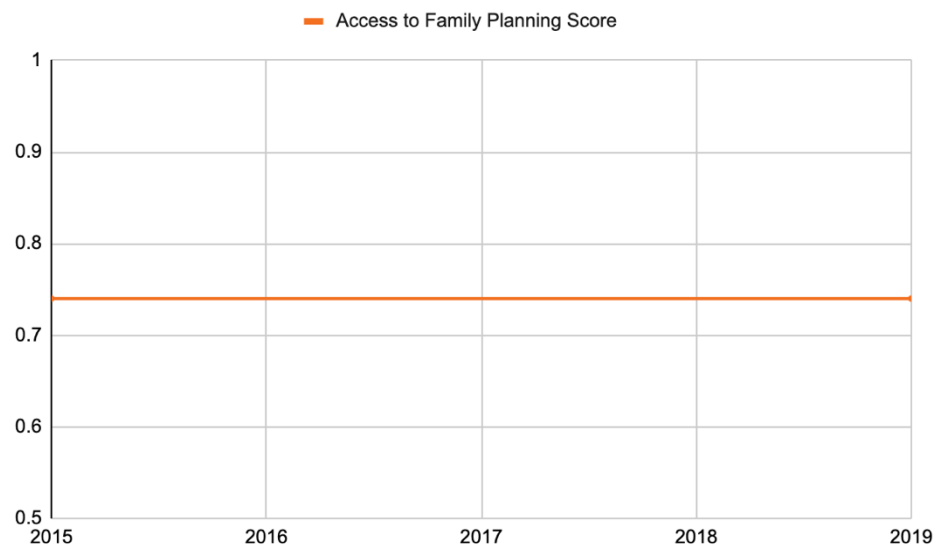
2019: 7.4

Description: Access to family planning is a crucial component of a community's reproductive and maternal healthcare landscape; these facilities are often the only resource for low-income individuals to access reproductive health care, contraception, or other sexual health care services such as STI testing and treatment.

Data: The number and location of clinics offering free or reduced cost family planning did not change from 2015 to 2019.

Notes: In future updates to the Opportunity Compass, rates of family planning will consider proximity to family planning clinics and other barriers to access; Planned Parenthood, A Woman's Choice, A Preferred Woman's Healthcare, Family Reproductive Health, and two Mecklenburg County Health Department facilities were open for service in 2015-2019; Family Reproductive Health Closed in 2021.

Calculation Notes: To represent this in the data without shifting index the score up or down, a neutral score of 7.4 was assigned to both years



Proximity to Grocery Store

2015: 2.8

2019: 3.0

Description: The percentage of residences with a grocery store less than half a mile from home. Living in an area with a major grocery store is associated with increased food stability including adequate nutrition as well as other neighborhood-level predictors of economic mobility.

Data: The percentage of residences with a grocery store

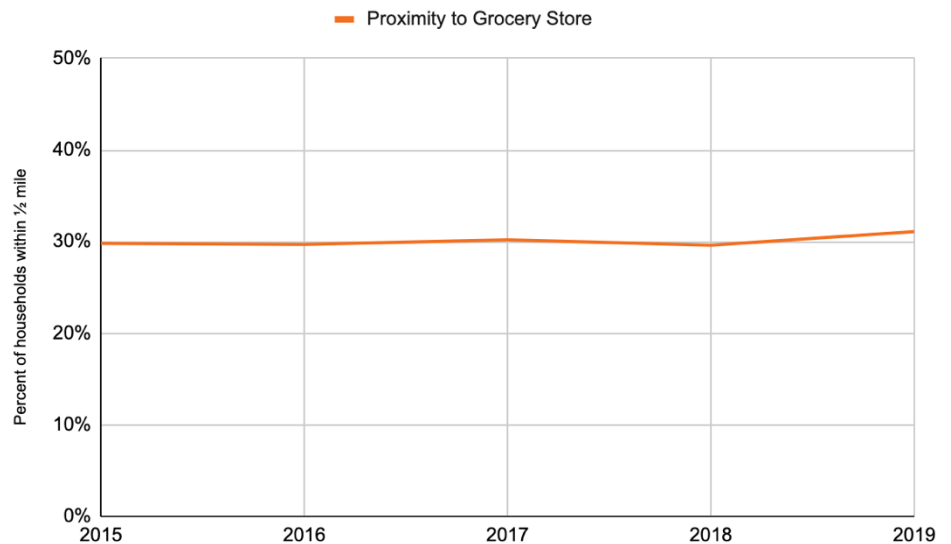
less than half a mile from home increased from 2015 to 2019, a positive outcome

Note: The total number of grocery stores increased from 141 in 2011 to 161 in 2021

Calculation Note: Five-year averages used; 2012 & 2013 data unavailable

Source: [Charlotte-Mecklenburg Quality of Life Explorer](#)

Data Updates: Annual



College & Career Readiness

Disconnected Youth

2015: 9.4

2019: 9.5

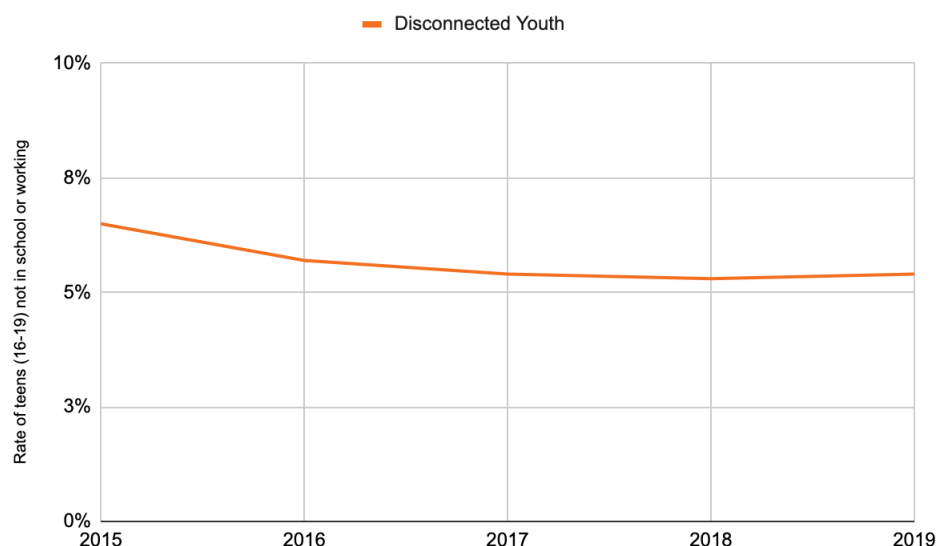
Description: Disconnected youth is defined as teens 16-19 who are neither attending school nor working. By measuring the rate of disconnected youth as a proportion of the overall sample, we better understand how much of our youth is at risk of becoming stuck in an economically immobile state.

Data: The percentage of disconnected youth in Mecklenburg County decreased from 2015 to 2019, a positive outcome

Calculation Note: Five-year averages reported; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: U.S. Census Bureau, American Community Survey five-year estimates, Table B14005 via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



High School Graduation Rate

2015: 8.5

2019: 8.2

Description: Rate of on-time graduation (within four years) in Charlotte-Mecklenburg high schools. There are clear disparities in outcomes based on income. To account for this disparity in our index, the reported numbers are an average of the total student graduation rate and that of the students who are economically disadvantaged (the primary population of interest in this index).

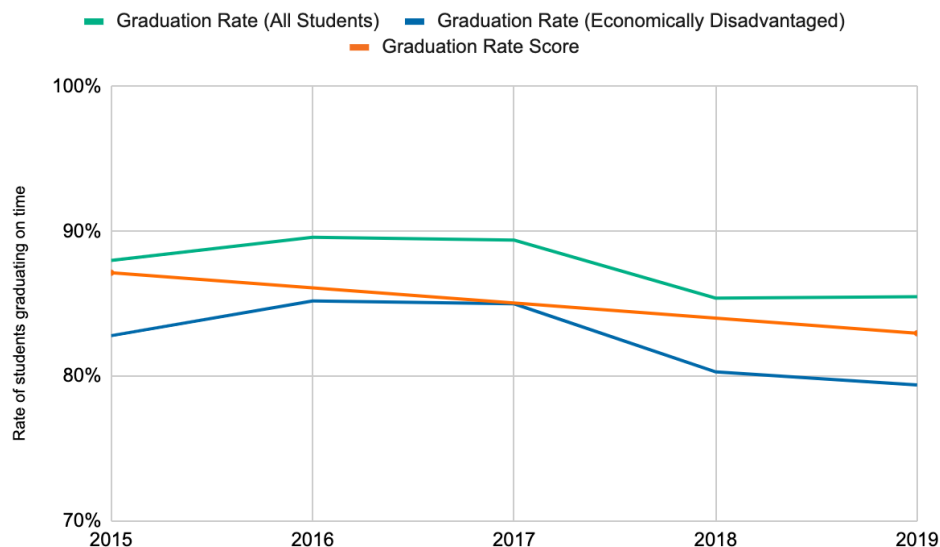
Data: Four-year graduation rates in Charlotte-Mecklenburg high schools have declined from 2015 to 2019 for both economically disadvantaged students and those who are not, a negative outcome

Note: Starting in the 2017-18 school year, statewide business rules were revised. As a part of this statistic, CMS now accounts for all students graduating on-time including transfer students who were enrolled substantially off-track.

Calculation Note: For the indicator score, data from years 2015-2019 were used to predict estimates based on bivariate linear regression for 2015 and 2019

Source: [NCDPI](#) Accountability Data Sets and Reports; [CMS](#) 2020-2021 Preliminary End-of-Year Results report, Sep. 1, 2021

Data Updates: Annual



College Prep Courses

2015: 1.7

2019: 2.2

Description: The percentage of CMS students who took at least one Advanced Placement (AP) course. AP courses are more rigorous and provide an opportunity for high school students to potentially gain college credits, bolstering college applications and increasing college readiness.

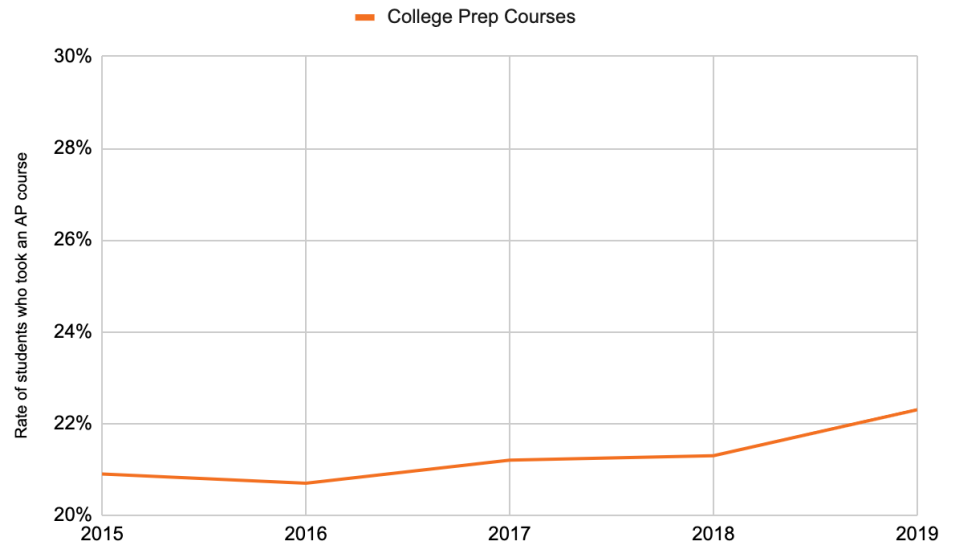
Data: The percentage of CMS students who took at least one AP course increased from 2015 to 2019, a positive outcome

Note: Data does not include students who take community college courses for credit or International Baccalaureate (IB) classes due to a lack of publicly available data

Calculation Note: 3-year averages reported

Source: [CMS Performance Dashboard](#)

Data Updates: Annual



ACT Scores

2015: 1.9

2019: 2.0

Description: The percentage of CMS students with ACT Scores at the highest "College and Career Ready" level as a fraction of the total test takers. Higher ACT scores are associated with better preparedness for college, military, and careers in skilled trades.

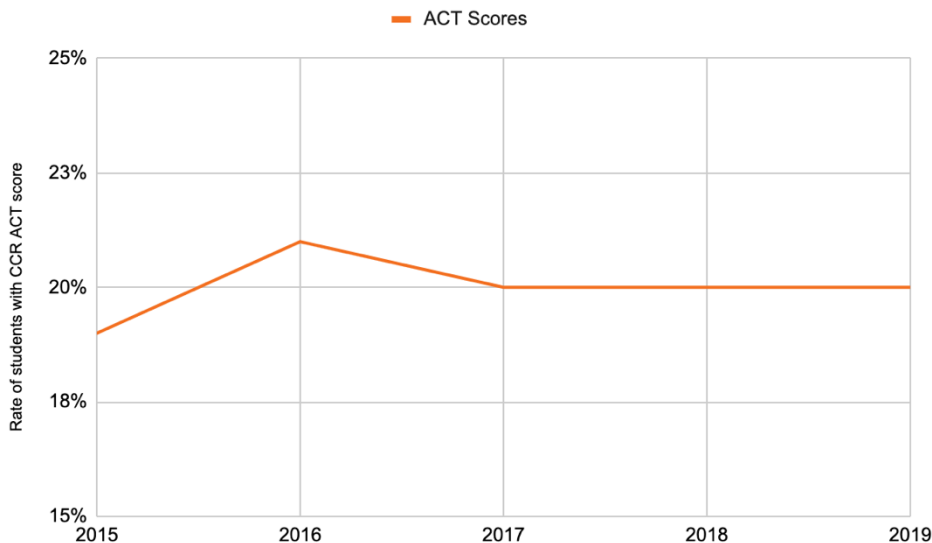
Data: The percentage of CMS students with ACT Scores at the

highest "College and Career Ready" level increased marginally from 2015 to 2019, a positive outcome

Calculation Note: Two-year averages reported

Source: NC Department of Public Instruction

Data Updates: Annual (1-year lag)



Young Adults Without a GED

2015: 8.5

2019: 8.7

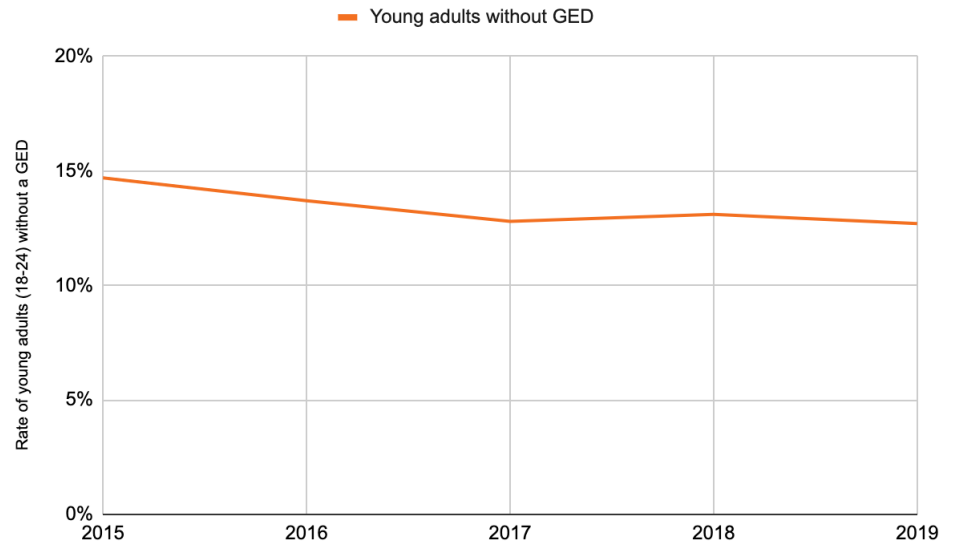
Description: The percentage of Mecklenburg residents aged 18-24 without a high school diploma or GED.

Data: The percentage of young adults without a GED decreased from 2015 to 2019, a positive outcome

Calculation Note: Five-year averages reported; Score is inverted to reflect that a decline in this indicator is a positive outcome

Source: U.S. Census Bureau, American Community Survey five-year estimates, Table S1501 via [Kids Count Data Center](#)

Data Updates: Annual (one-year lag)



Local Young Adults with College Degrees

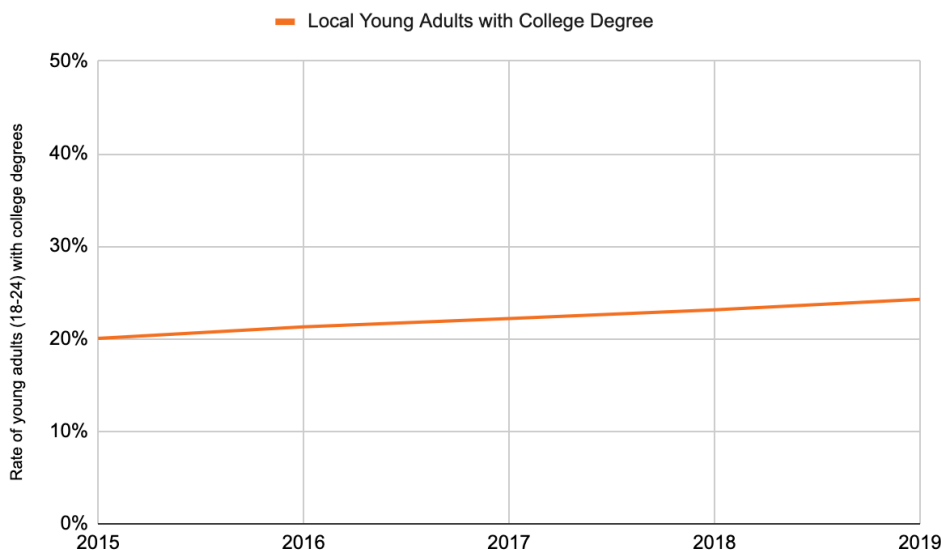
2015: 2.0

2019: 2.4

Description: The percentage of young adults (residents aged 18-24) with a college degree (Associates degree or higher). This statistic includes current residents of Mecklenburg County regardless of origin.

Data: The percentage of young adults with a college degree increased from 2015 to 2019, a positive outcome

Calculation Note: Five-year



averages reported

Source: U.S. Census Bureau, American Community Survey five-year estimates, [Table B15001](#)

Data Updates: Annual (1-year lag)

Local College Graduation Rates

2015: 2.4

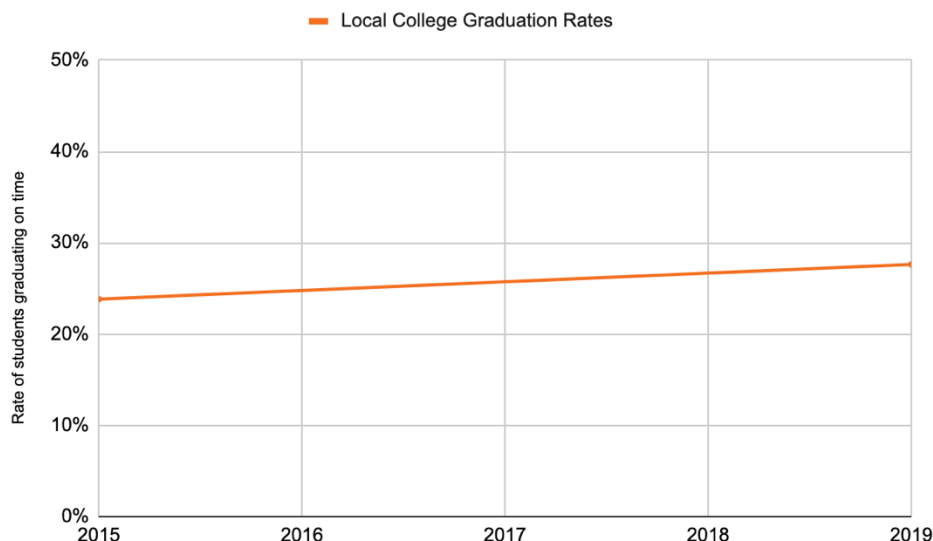
2019: 2.8

Description: The percentage of local college students who graduated on time according to institutional standards. This was calculated by averaging the graduation rates of Pell-recipient Mecklenburg residents and that of all Mecklenburg residents that attend the university to better represent our target population.

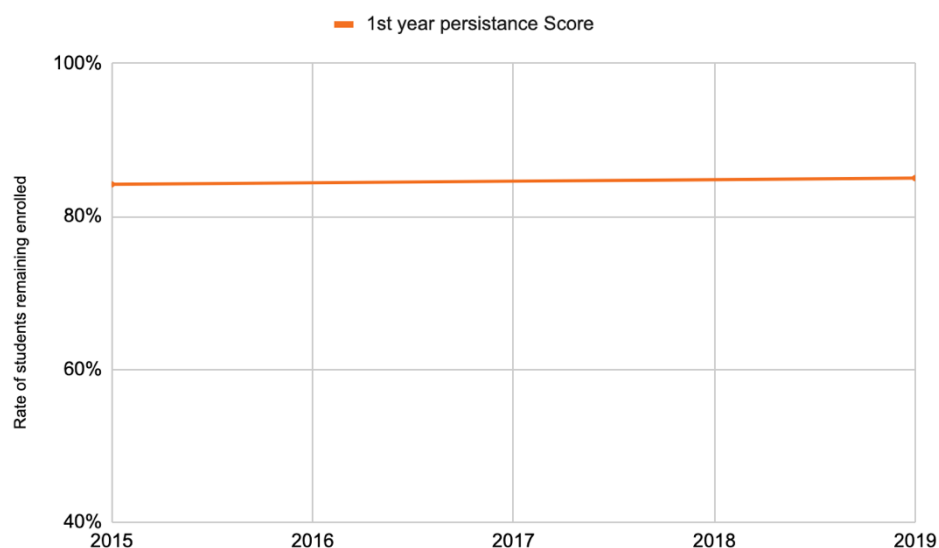
Data: The percentage of local college students who graduated on time increased from 2015 to 2019, a positive outcome

Calculation Notes: Reported numbers are a weighted average based on enrollment across colleges; five-year averages reported; On time graduation rates by institution are as follows: Davidson – six years, UNC Charlotte – four years, CPCC – three years; No significant difference is found between the four- and six-year graduation rates at Davidson College.

Source: Davidson, UNCC, CPCC (Special Request)



First Year Persistence



2015: 8.4

2019: 8.5

Description: The percentage of local college students who remain enrolled through their second year of college. This was calculated by averaging the retention rates of Pell-recipient residents and that of all Mecklenburg residents that attend local universities to better represent our target population.

Data: First year persistence increased slightly from 2015 to 2019, a positive outcome

Calculation Note: Reported numbers are a weighted average based on enrollment across colleges; five-year averages reported

Source: Davidson, Queens, UNCC, JCSU, CPCC (Special Request)

Apprenticeships

2015: 7.3

2019: 7.5

Description: The apprenticeship indicator is measured as the number of participants who remained enrolled in apprenticeship programs approximately one-year after matriculation as a fraction of the number of people who enrolled in apprentice programs. This number might help us understand how well these training programs are working

in our community by considering how many people remain enrolled after about one-year.

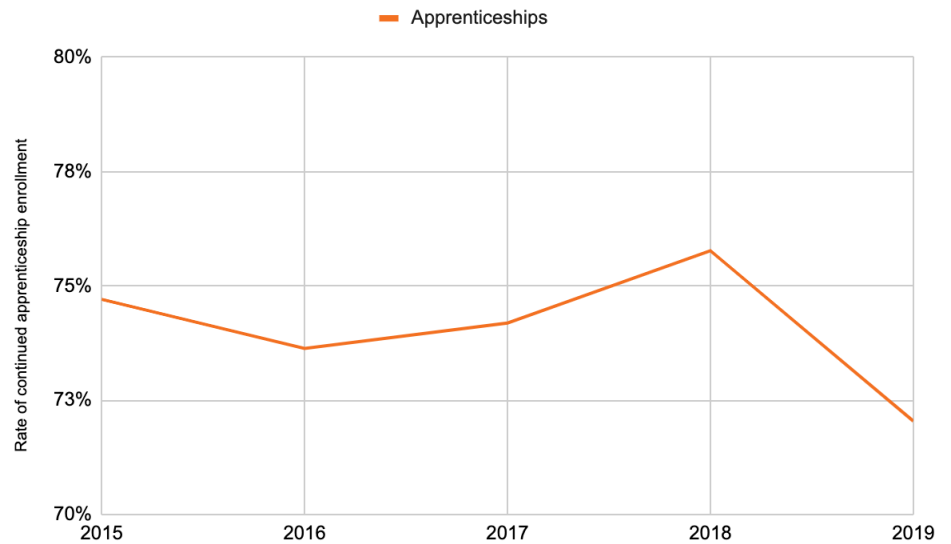
Data: This rate increased across the state from 2015 to 2019.

Note: Data are statewide measurements of community college apprenticeship programs.

Calculation Note: Data from years 2016-2020 were used to predict estimates based on bivariate linear regression for 2015 and 2019

Source: [ApprenticeshipNC 2019-2020 Annual Report](#)

Data Updates: Annual



Early Care & Education

Early Intervention Services

2015: 5.2

2019: 5.4

Description: The rate of children receiving early intervention services to reduce the effects of developmental delay, emotional disturbance, and/or chronic illness as a percentage of those referred.

Data: The rate of early intervention services sought increased from 2015 to 2019, a positive outcome. It is important to note that conclusions drawn

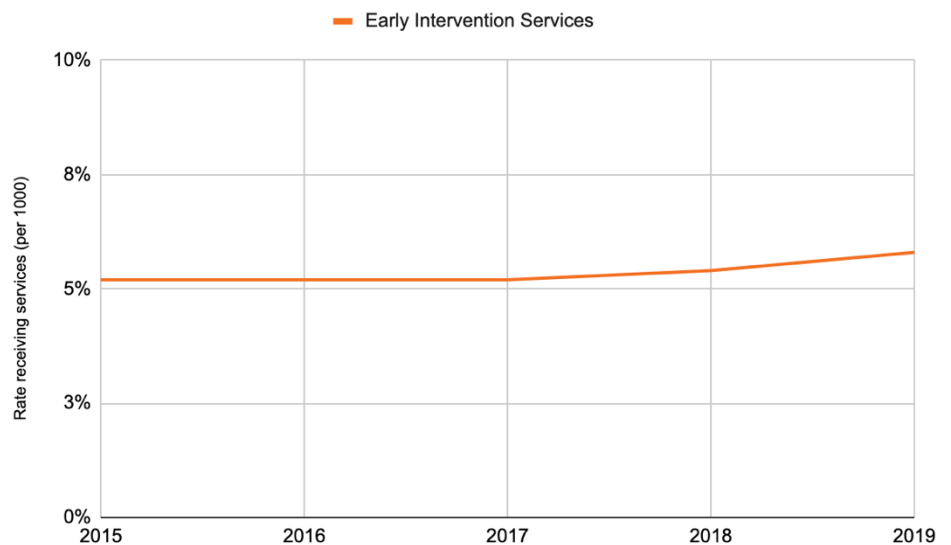
from this statistic must assume that the rate of children with special needs is not increasing or outpacing the number of referrals to early intervention services—the true number for children who might benefit from services in Mecklenburg County is unknown. However, since the number of referrals has increased overtime along with the number of children served, we can be more confident that this statistic captures the rate of care as a proportion of need.

Calculation Note: 4-year averages used; Rate per 1000

Source: NCDPH via [Kids Count Data Center](#)

Note: Though the data reported is from the North Carolina Division of Public Health (NCDPH) for children ages 0-3, additional data from Smart Start validates these trends for children ages 0-2 and 3-5. Ultimately, NCDPH data reported through Kids Count was used due to the wider span of temporal data available.

Data Updates: Annual (requires special data request from NCDPH)



Access to Quality Early Care

2015: 8.7

2019: 8.2

Description: Access to quality care is measured as the rate of enrollment in 4–5-star facilities as a proportion of total enrollment.

Data: Access to quality care declined from 2015 to 2019, a negative outcome. Though the rates of enrollment in 4–5-star, "high quality" care centers remain high—particularly for

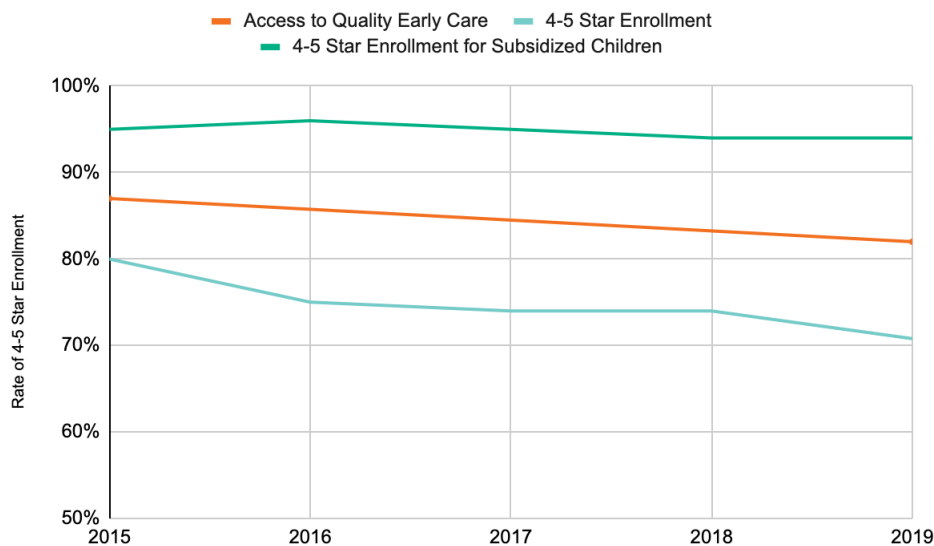
those children with subsidies—this decline might be concerning because access to quality care was ranked by the community as the most impactful factor in ECE for economic mobility. It should also be noted that both the number of seats available in 4–5-star centers and the proportion of enrollment in 4–5-star centers are both declining which indicates that the availability of and/or access to these centers are areas of potential concern.

Calculation Note: This number is an average of enrollment rates for all students and those who receive subsidized care to better capture the population of interest (low-income children and families).

Source: DCDEE (Special Request)

Note: Special thanks to our community partner, Smart Start for data collaboration

Data Updates: Annual



Access to Highly Qualified Educators

2015: 4.5

2019: 4.2

Description: The "Access to Highly Qualified Educators" indicator measures the exposure that children have to environments where educators have higher levels of qualification and environments where the ratio of staff to children is higher. This measure consists of three distinct parts: (i) enrollment rates for Child Care Centers of any star level

where at least 75% of lead teachers have at least 7 Lead Teacher Education Points as a fraction of enrollment overall, (ii) enrollment rates for Child Care Centers of any star level where directors have at least 7 Administrator Points as a fraction of enrollment overall, and (iii) a ratio consisting of the total center staff compared to enrolled children, averaged across all licensed Child Care Centers in Mecklenburg county. Taken together, these numbers serve as a unified measure that seeks to represent the potential for children's interactions with trained educators without relying on the star system as an ultimate measure of quality.

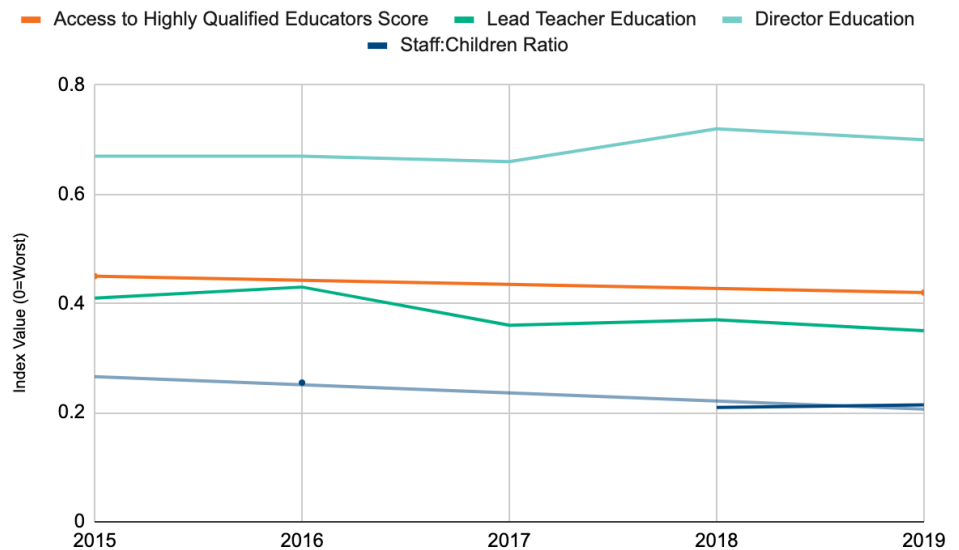
Data: Access to Highly Qualified Educators declined from 2015 to 2019, a negative outcome

Calculation Note: For lead teacher and director education, data from years 2015-2019 were used to predict estimates based on bivariate linear regression for 2015 and 2019; Staff to child ratios were calculated for 2015 and 2019 based on bivariate linear regression using data provided for years 2016, 2018, and 2019; The three sub-indicators were averaged to calculate the top-line indicator score.

Source: DCDEE

Note: Special thanks to our community partner, Smart Start for data collaboration

Data Updates: Annual



Proximity to Care

2015: 6.5

2019: 6.3

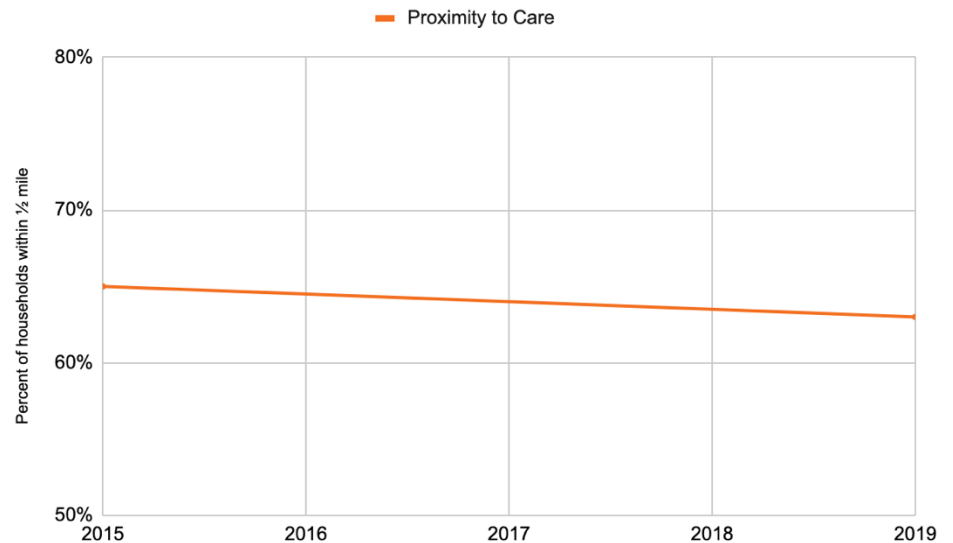
Description: Using data provided by the city of Charlotte, a sub-index was created for the percentage of residences within half a mile of early care and education facilities as well as school aged care.

Data: Though declines can be seen for both types of providers, there is a much sharper decline in residents within a half mile of early care centers from 2015 to 2019, a negative outcome

Calculation Note: Data was provided by the city for the years 2011, 2013, 2015, 2017, and 2020; predicted estimates based on bivariate linear regression for 2015 and 2019 were used; Reported scores are an average of proximity to both early care and education and school aged care

Source: [Charlotte-Mecklenburg Quality of Life Explorer](#)

Data Updates: Annual



Parity Between Types of Care

2015: 5.3

2019: 5.7

Description: Disparities between types of care in Charlotte—specifically, licensed Family and Child Care Homes (FCCH) and Child Care Centers (CCC)—appear to have lessened slightly from the years 2015 to 2019.

These numbers are constructed based on two sub-indicators: (i) a parity index for the percentage of 4–5-star FCCH versus 4–5-star CCC, and (ii) an

estimated revenue parity measure based on enrollment and rates associated with 4–5-star FCCH and 4–5-star CCC. First, the percentage of 4–5-star FCCH as a fraction of the percentage of 4–5-star CCC tells us how the ratio of highly rated centers compares across groups. Second, an approximation of revenue by center type was constructed by multiplying 4–5-star enrollment rates according to capacity by the average 4–5-star rates/fees charged by each center type.

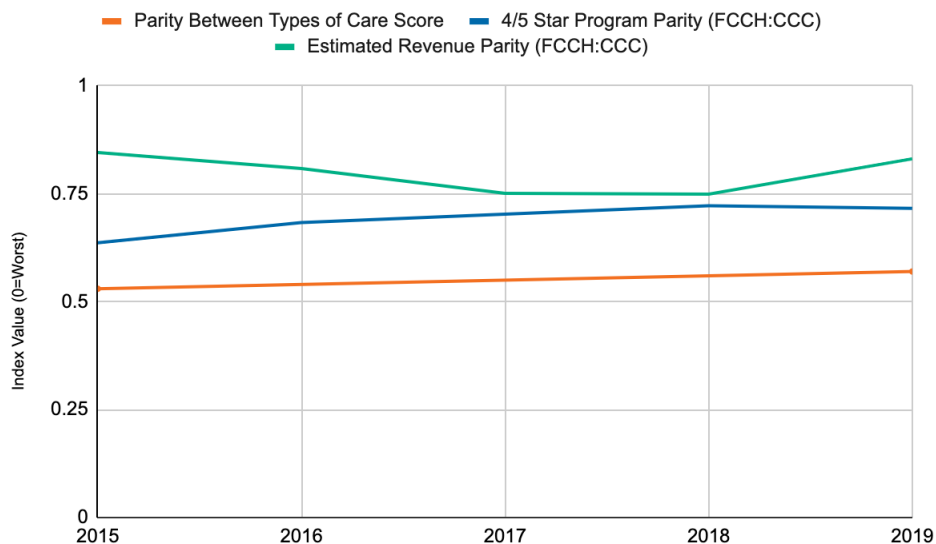
Data: From 2015 to 2019, disparities between the percentage of 4–5-star centers across groups improved. From 2015 to 2019, estimated revenues by center type became somewhat more disparate. Taken together, we find that these centers inched closer to parity in the measured areas from 2015 to 2019.

Calculation Notes: To unify these two parity indexes, we multiplied the numbers to show a clear picture of disparities between center types according to the overall proportions of highly rated centers and an estimate of their revenues. Data from years 2015–2019 were used to predict estimates based on bivariate linear regression for 2015 and 2019.

Source: DCDEE

Note: Special thanks to our community partner, Child Care Resources Inc. for data collaboration

Data Updates: Annual



Impact of Segregation

Disparities in Education

2015: 3.3

2019: 3.4

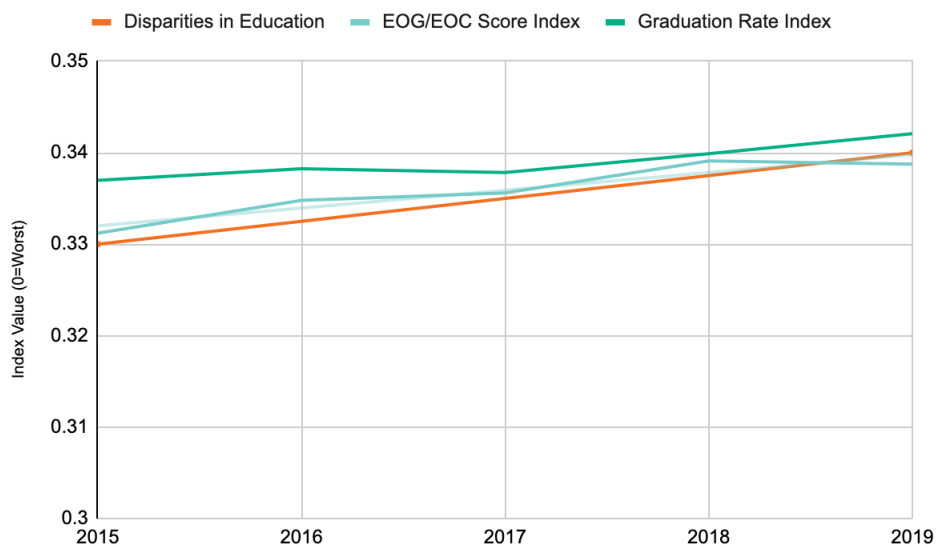
Description: To capture disparities in education, scores that measure the differences between the outcomes of students of different races were constructed for both graduation rates and test scores.

Data: Outcomes moved slightly closer to parity from 2015 to 2019; this is true for both the percentage of students in each racial category who achieve End of Grade (EOG) and End of Class (EOC) scores in the highest, "college and career ready" category as well as for timely, 4-year graduation rates.

Calculation Note: Measures of non-randomness (weighted entropy indices) were constructed to calculate the level of disparities between races for both EOC/EOG test scores at the college and career readiness level and timely graduation rates; Data from years 2015-2019 were used to predict estimates based on bivariate linear regression for 2015 and 2019; The estimates for EOC/EOG scores and graduation rates were averaged to calculate the top-line indicator

Source: [NCDPI Accountability Data Sets and Reports](#)

Data Updates: Annual (1-year lag)



Disparities in Work

2015: 3.3

2019: 3.4

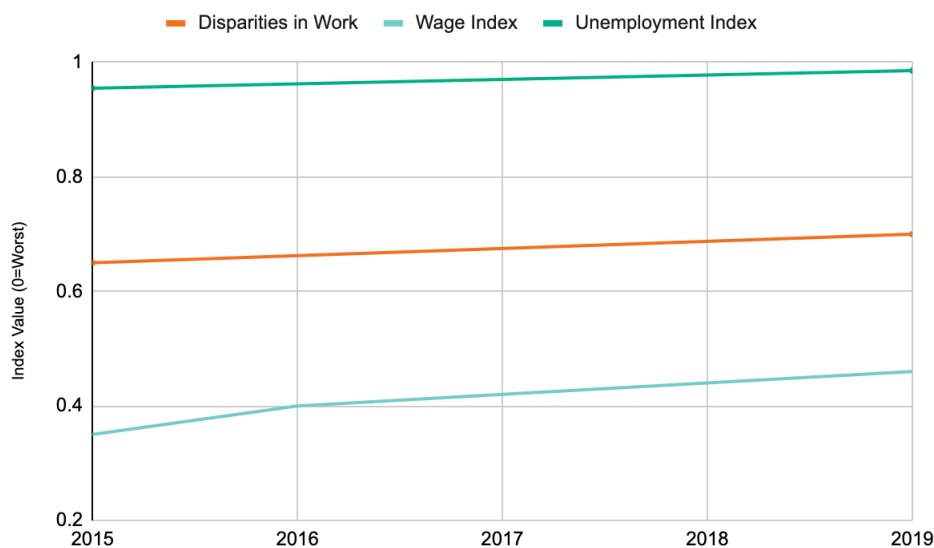
Description: The "disparities in work" indicator measures differences in employment outcomes across races in two areas: (i) racial parity amongst the highest earners in Mecklenburg County and (ii) the diversity of unemployed workers in Mecklenburg County.

Data: Differences in wages and unemployment between races both moved closer to parity (became more equal) from 2015 to 2019.

Calculation Notes: Wage disparities are calculated using a cumulative parity index using White as the reference group; A Blau index is used to calculate disparities in unemployment numbers across races; The two sub-indicators are averaged to calculate the top-line indicator; Racial categories measured in this calculation include: Black or African American, Asian, Hispanic or Latino, White, and "Other;" Races with high levels of marginal error such as Native Americans were removed

Source: U.S. Census Bureau, American Community Survey five-year estimates, [Table S2301](#) & U.S. Census Bureau, [LEHD Origin-Destination Employment Statistics](#)

Data Updates: Annual (1-year lag)



Disparities in Housing

2015: 2.9

2019: 3.1

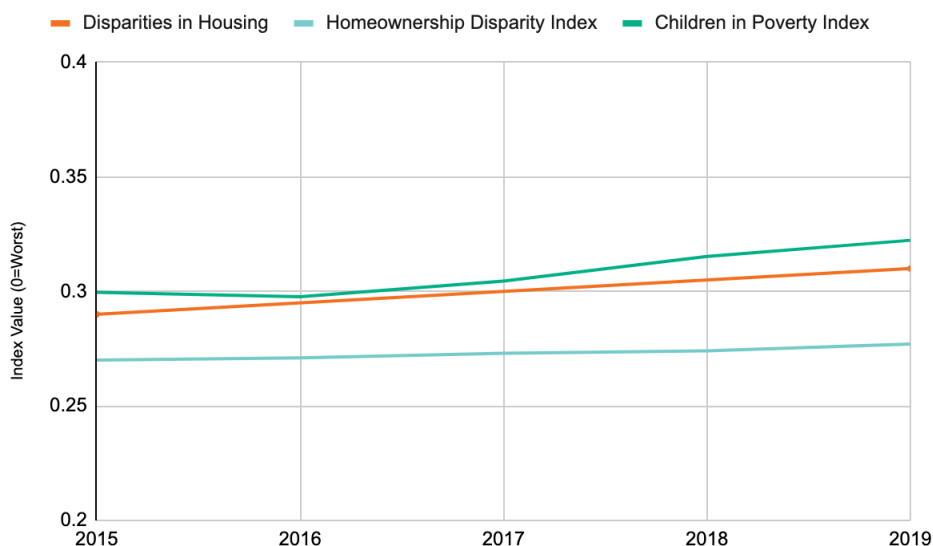
Description: Disparities in housing are calculated using two measures: (i) differences in homeownership between races, and (ii) differences between the number of children living in poverty by race. Differences in this sub-indicator were measured across races.

Data: This indicator shows that disparities in housing moved closer to parity from 2015 to 2019.

Calculation Note: Because data related to the cost of housing as a percentage of income are not available for types of families across races, capturing a measure of income stability across races was important for this number. Since poverty is highly correlated with housing instability, we chose to use our "Children in Poverty" indicator as a proxy for housing instability. Measures of non-randomness (weighted entropy indices) were constructed to calculate the level of disparities between races for both homeownership rates and children in poverty; the two sub-indicators are averaged to calculate the top-line indicator. Five-year averages are used.

Source: U.S. Census Bureau, American Community Survey five-year estimates, Table B07013; U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), via [Kids Count Data Center](#)

Data Updates: Annual (1-year lag)



Disparities in Healthcare

2015: 6.2

2019: 6.4

Description: Three measures were included in our “disparities in healthcare” sub-index: life expectancy, low birthweight, and infant mortality. For each, an appropriate diversity index was selected to measure disparities in outcomes by race.

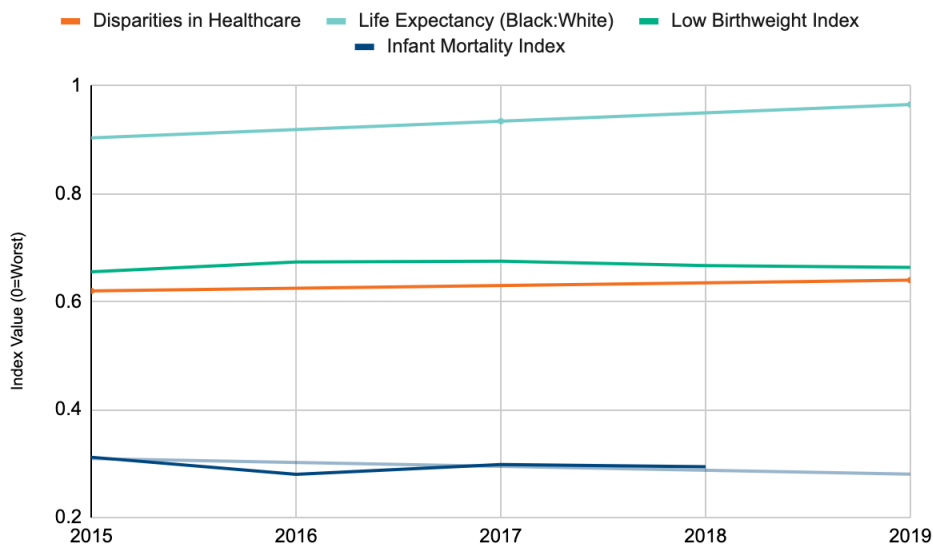
Data: Across two of the three categories—life expectancy and low birth weight—outcomes are moving closer to parity. For

infant mortality, outcomes are becoming more unequal. Taken together, this sub-index shows marginal improvements for Charlotte in the area of health equity from 2015 to 2019.

Calculation Notes: For low birth weight, Blau indices were calculated across the racial categories African American, White, Hispanic, and Other (five-year averages reported); For infant mortality, a measure of non-randomness was constructed (weighted entropy index) to measure disparities between racial categories African American, White, Hispanic, and Other (data from years 2013-2019 were used to predict estimates based on bivariate linear regression for 2015 and 2019); Due to public data limitations, disparities in life expectancy were calculated by measuring parity between Black (numerator) and White (denominator) life expectancies and forecasting 2015 and 2019 estimates using bivariate linear regression based on 2017 and 2019 data; The three sub-indicators are averaged to calculate the top-line indicator

Source: NC State Center for Health Statistics via North Carolina Institute of Medicine; North Carolina Department of Health and Human Services, State Center for Health Statistics: North Carolina Infant Mortality Report, Table 1 & North Carolina Live Birth Data via [Kids Count Data Center](#)

Data Updates: Annual (1-year lag)



School Segregation

2015: 2.5

2019: 2.5

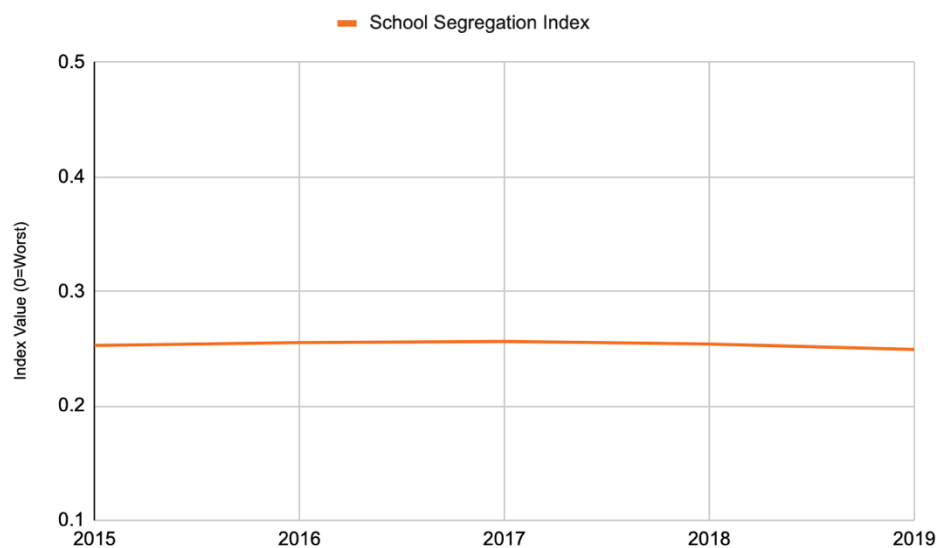
Description: This indicator measures the diversity of each school within the CMS system and compares schools based on the number of students in each school and the proportion of each race. On this scale, a 0 represents complete segregation and 10 represents perfect integration.

Data: CMS schools became very slightly more integrated from 2015 to 2019

Calculation Note: Calculated using Theil's index in the [Segregation package for R](#) (Elber, 2021)

Source: [NCDPI](#) Accountability Data Sets and Reports

Data Updates: Annual



Residential Segregation

2015: 8.0

2019: 8.1

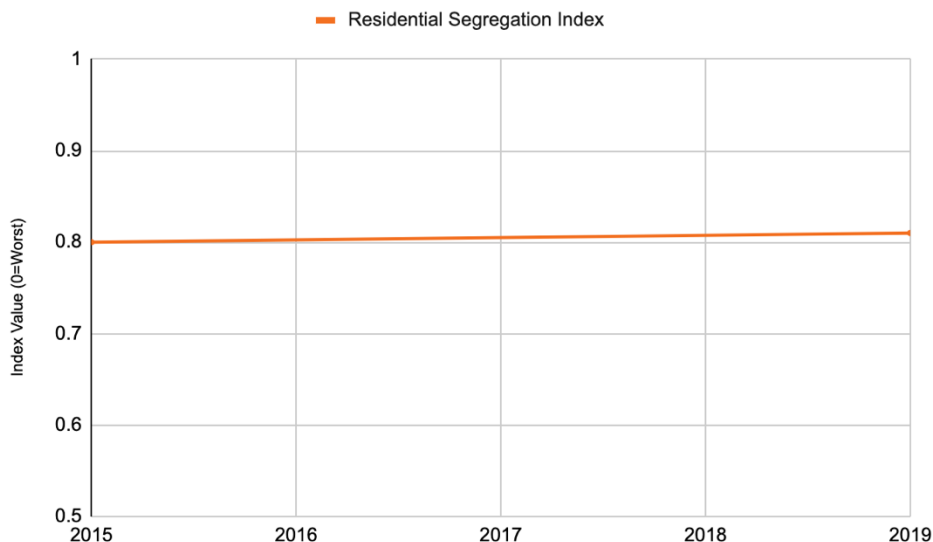
Description: The residential segregation indicator accounts for diversity within each census tract as well as the uniformity of diversity levels across the city.

Data: When considering relative diversity rates throughout the city (but not favoring any one particular race), Charlotte-Mecklenburg scores relatively high (0.80-0.81; 1.00 being the highest), meaning that census tracts throughout Charlotte-Mecklenburg are relatively evenly diverse.

Calculation Note: This measurement does not use White as the "touchstone" race, meaning that the racial compositions of each census tract are not compared against each other in relation to the percentage of Whites in each tract. As such, this measure positively values the likelihood that a person of any race will encounter a person of any other race; calculated using White's (1986) [entropy index for a city](#)

Source: U.S. Census Bureau, American Community Survey, [Table B25003](#)

Data Updates: Annual (1-year lag)



Future Work

There are a small number of indicators across our three determinants that we were interested in measuring but for various reasons could not include in this version of the Opportunity Compass. For example, we would have ideally included a measure of transportation accessibility in Child & Family Stability. However, the research on transportation's effects on economic mobility is very complex; our tool will need to capture those disparities between neighborhood access to public transportation, road connectivity, traffic times, and even the price of used vehicles. We want to take the time to get measures like this right.

Several other indicators are absent from this version of the Opportunity Compass due to a lack of data availability. We believe that as this project is shared throughout the community, more opportunities for data collaboration will be possible and a stronger Opportunity Compass will emerge.

Below are a few indicators we would like to measure in a future version of the Opportunity Compass:

Child & Family Stability

- Mental health outcomes for parents, children, and young adults alike
- Maternal health outcomes
- Affordable housing availability including opportunities for displacement avoidance
- Transportation accessibility across neighborhoods of various economic and racial compositions

College & Career Readiness

- Guidance counselor engagement in CMS schools
- Career & Technical Education program measures
- Apprenticeship programs in Charlotte-Mecklenburg (private and public)

Early Care & Education

- Early reading ability
- Disparities in early care and education discipline (expulsion, isolation, and inequities)
- Comprehensive enrollment information for Public Pre-K (Meck Pre-k, NC Pre-K, Bright Beginnings, & Head Start)