THE LONG-RUN EFFECTS OF AMERICA'S LARGEST RESIDENTIAL RACIAL DESEGREGATION PROGRAM: GAUTREAUX*

Eric Chyn
Robert Collinson
Danielle H. Sandler

This paper studies the effects of the largest residential racial desegregation initiative in U.S. history, the Gautreaux Assisted Housing Program. From the late 1970s to the 1990s, Gautreaux moved thousands of Black families into predominantly white neighborhoods to support racial and economic integration. We link historical program records to administrative data and use plausibly exogenous variation in neighborhood placements to study how desegregating moves impact children in the long-run. Being placed in the predominantly white neighborhoods targeted by the program significantly increases children's future lifetime earnings and wealth. These moves also increase the likelihood of marriage and particularly raise the probability of being married to a white spouse. Moreover, placements through Gautreaux impact neighborhood choices in adulthood. Those placed in predominantly white neighborhoods during childhood live in more racially diverse areas with higher rates of upward mobility nearly 40 years later. *JEL codes:* J01, H00, R38, I30.

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I. INTRODUCTION

Segregation by race is a defining feature of neighborhoods in the United States. Despite the fact that Black households make up 12 percent of the population, the average Black family lives in a neighborhood that is 40 percent Black (Logan, Stults, and McKane, 2023). The existence of large disparities in income and wealth by race (Bayer and Charles, 2018; Derenoncourt et al., 2024) implies that racial segregation often drives economic segregation: the typical Black family resides in a neighborhood with a poverty rate that is nearly double the rate for the average white family. Theory and descriptive evidence suggest that racial and economic segregation play an important role in explaining Black poverty in major U.S. cities (Wilson, 1987; Jencks, Mayer, et al., 1990; Massey, 1990). However, less is known about the effectiveness of policies aimed at reducing residential segregation.

This paper studies the long-run consequences of the Gautreaux Assisted Housing Program, the largest initiative to racially desegregate housing in U.S. history. From 1976 to 1998, Gautreaux sought to reduce segregation by moving more than 7,000 Black families from urban neighborhoods in Chicago to new areas. The result of a class action lawsuit, Gautreaux served as a model for subsequent civil rights cases filed throughout the country that also sought to desegregate neighborhoods through reforms to public housing or voucher policies.

Gautreaux was a unique housing mobility program because it aimed to place Black families in predominantly white and often low-poverty neighborhoods. This emphasis differed from the landmark Moving to Opportunity (MTO) housing voucher experiment which focused on increasing moves to low-poverty areas with no direct consideration of neighborhood racial composition. Among MTO participants who relocated to low-poverty neighborhoods, just 18 percent moved to neighborhoods that were majority white. Thus, the Gautreaux setting provides a rare opportunity to study the *combined* effects of reducing racial and economic residential segregation.

At the outset, it is unclear whether, and to what extent, moving to the neighborhoods targeted by Gautreaux could impact families in the program. On one hand, Black families and their children may benefit if moving to predominantly white and low-poverty neighborhoods coincides with exposure to lower crime rates, enrollment in schools with greater resources, or access to social networks that promote economic mobility (Clampet-Lundquist et al., 2011; Chetty et al., 2022). On the other hand, the Gautreaux families moving to these neighborhoods could face risks due to hostility from institutions or members of their new communities. For example, Black children living in predominantly white neighborhoods might encounter increased scrutiny by police (Bergman, 2018) or stigmatization by school officials (Bacher-Hicks, Billings, and Deming, 2019; Chin, 2021). Moreover, predominantly white neighborhoods could respond to the arrival of Black families by changing public policy to curtail opportunities for minorities (Derenoncourt, 2022).[1]

[1]Another consideration is that Gautreaux participants often had to make long-distance moves if they were

While Gautreaux's guidelines prioritized relocating families to predominantly white neighborhoods that had less than 30 percent Black residents, program administrators struggled to find enough rental units in these communities that would lease to Black tenants. Consequently, Gautreaux moved some families to a set of neighborhoods with substantial Black populations defined as "revitalizing" areas by the program. Since Gautreaux staff relocated families primarily based on registration order, we argue that comparing participants placed in predominantly white neighborhoods to those in revitalizing Black areas estimates the causal effect of desegregating moves. After accounting for factors that program staff considered for placement decisions—namely, a family's location at registration—we demonstrate that families moved to predominantly white neighborhoods were similar across a range of pre-move characteristics to those placed in revitalizing Black areas.

We construct novel data by linking digitized historical records from the Gautreaux program to administrative and Census data. This allows us to conduct the first long-run study of children's outcomes, as well as the most comprehensive analysis to date on their parents. We study impacts on labor market outcomes by linking the Gautreaux program data to more than two decades of earnings and employment records from the Longitudinal Employer-Household Dynamics (LEHD) data. To estimate impacts on marriage, incarceration, and home-ownership, we linked our sample to the 2010 Decennial Census. We also investigate the effects on mortality using data from the Census Bureau's Numerical Identification (Numident) file. Finally, we examine whether experiencing a desegregating move caused children to chose to live in more racially diverse neighborhoods decades later using the MAF-ARF, an internal Census Bureau file that contains longitudinal address records.

Children desegregated through the Gautreaux program experienced significant economic gains relative to those who moved to revitalizing Black neighborhoods. We estimate that children placed in predominately white neighborhoods during childhood earned about $2,300 (20 percent) more at ages 24-28 and accumulated $34,000 (18 percent) more in lifetime earnings by age 38. These improvements in labor market outcomes have implications for household wealth: treated children are 10 percentage points more likely to own a home by their mid-30s and live in neighborhoods with 2.5 percentage points lower poverty rates.

The impacts of Gautreaux extend beyond standard economic outcomes. Children who experienced a desegregating moves during childhood choose to live in significantly more diverse neighborhoods nearly 40 years later. The treated children live in neighborhoods that are, on average, 35 percent Black (9.8 percentage points lower than children placed in revitalizing Black neighborhoods) and 38 percent non-Hispanic white (6.6 percentage points higher). We show that these effects are not driven by an increased tendency to live with parents or an increased propensity to live in their original placement neighborhood in adulthood. Treated children are also 24 percent (6.9 percentage points) more likely to be married in the 2010 Census and about twice as likely to be married to a white spouse

placed in a predominantly White neighborhood. This could worsen participant outcomes by reducing proximity to family and other supportive ties (Barnhardt, Field, and Pande, 2017).

(a 2 percentage point increase). In addition, our analysis shows children treated through Gautreaux live in later-life neighborhoods that offer higher-levels of predicted upward mobility as measured by the Opportunity Atlas (Chetty et al., 2018). This suggests that moves through Gautreaux may have important impacts on subsequent generations.

Our main findings remain unchanged throughout a series of robustness exercises. In the most stringent approach, we estimate impacts of desegregating moves using specifications that includes family fixed effects and compares outcomes between younger and older siblings. These specifications test whether there are distinct impacts *within* a family for children who were exposed to predominantly white neighborhoods for a longer duration because they moved at earlier ages. Consistent with an exposure effects model (Chetty, Hendren, and Katz, 2016; Chetty and Hendren, 2018), we find that younger children benefited more than their older siblings. This household fixed-effects design suggests that our primary specification is unlikely to be confounded by fixed unobservable differences between families.

This paper contributes to the literature studying whether and how neighborhoods shape children's outcomes. Most notably, our analysis innovates and extends on previous research on the Gautreaux Housing Assistance Program in three main ways. First, we provide new long-run evidence on the impacts of Gautreaux by providing the first analysis of children's later-life earnings, wealth (as measured by home-ownership), and social outcomes such as marriage. Prior work on Gautreaux children was limited to impacts on criminal justice involvement (Keels, 2008) and mortality (Votruba and Kling, 2009).[2] Moreover, our data measure outcomes nearly four decades after the intervention—allowing us to examine the persistence of impacts. Second, our analysis uses the most complete records of Gautreaux participants linked to administrative and Census data. Early studies of Gautreaux relied on small-scale surveys with relatively high rates of non-response (Rosenbaum, 1991; Rosenbaum, 1995; Rosenbaum et al., 1991; Rubinowitz and Rosenbaum, 2000). Third, our empirical strategy allows us to obtain more convincing evidence on the impacts of moves through Gautreaux. Our approach isolates plausibly exogenous neighborhood placements using a research design that differs from earlier studies of Gautreaux. We provide evidence that our design addresses concerns over selection bias and present a range of sensitivity analyses that further support a causal interpretation for our findings.

Furthermore, we also contribute to the neighborhood effects literature by conducting two exercises that shed light on the distinct effects of neighborhood racial and economic characteristics. First, we leverage the quasi-random assignment of Gautreaux families to a wide range of neighborhoods to estimate a series of "horse-race" regressions that include racial composition and poverty measures as independent variables in the same model. Second, we compare the overall effects of desegregating moves from Gautreaux with newly-produced and existing estimated impacts of moving through the MTO program. As noted above, MTO reduced exposure to economically disadvantaged areas but did not substantially change

[2]Distinct from our focus, prior long-run studies of Gautreaux studied the outcomes of adult mothers (DeLuca, 2005; Mendenhall, DeLuca, and Duncan, 2006; DeLuca et al., 2010).

racial segregation.

Relative to economic integration, we find that neighborhood race appears to have distinct impacts on social outcomes. In a multivariate specification that exploits variation in neighborhood placement *within* the Gautreaux sample, placement neighborhood racial composition—and not the poverty rate—is largely responsible for changes in social outcomes such as later-life exposure to less racially segregated neighborhoods and interracial marriage. We also find a supportive pattern of results after linking the MTO sample to address records from MAF-ARF. Specifically, children of families that moved through MTO chose later-life neighborhoods that have lower poverty rates but negligible differences in racial composition. Again, this contrasts with results from Gautreaux where we find that moving to a predominantly white neighborhood during childhood led children to select neighborhoods during adulthood that are more white and less Black.

For economic outcomes, the weight of the evidence suggests that much of the effect of racial desegregation is mediated by the associated reduction in exposure to neighborhood poverty. Support for this view comes from comparing the reduced form impacts of moves to predominantly white, low-poverty neighborhoods prioritized by Gautreaux to the impacts of moving to racially segregated, low-poverty areas in MTO—both programs generated similar-in-magnitude impacts on later-life earnings of children. In the results from a multivariate model that features both neighborhood race and poverty rates, the point estimate for poverty rates is large, although this result is not precisely estimated.

Finally, our work contributes to a broader literature studying the effects of policies and programs that aim to reduce U.S. racial segregation. Prior work has focused on the impact of school-based desegregation. Guryan (2004), Johnson (2011), and Anstreicher, Fletcher, and Thompson (2022) find that court-ordered school desegregation during the 1960s through the 1980s reduced dropout rates, improved labor market outcomes, and decreased the likelihood of incarceration for Black children. Bergman (2018) and Setren (2024) examine school integration programs in other contexts and find beneficial impacts on school test scores and college-going outcomes. In contrast to these studies, we provide comprehensive analysis of the largest residential racial desegregation policy in U.S. history. We provide evidence that the effects of relocating through Gautreaux are unlikely to be driven solely by changes in school quality. This finding suggests that policies aimed at increasing racial integration may be effective even when they do not exclusively focus on changing school environments of children.

II. BACKGROUND

II.A. Residential Desegregation Litigation and Dorothy Gautreaux

After the passage of the Voting Rights Act of 1965, the civil rights movement in the U.S. shifted its focus to racial inequality in Northern cities. Although discrimination in education and employment opportunities remained important targets, a push for open housing became an essential part of civil rights efforts outside of the South. Advocates for open housing

viewed residential segregation and racial discrimination in housing as a major threat to progress towards integration.

Chicago became a focal point in the effort to dismantle racial discrimination in housing. In 1966, Dr. Martin Luther King Jr. temporarily moved into the impoverished North Lawndale neighborhood on Chicago's west side as part of a year-long effort to fight for open housing in the city.[3] At the conclusion of his time in Chicago, Dr. King, alongside local civil rights leaders, established the Leadership Council for Metropolitan Open Communities to continue the fight for open housing in the Chicago metropolitan area.

One significant development in the open housing movement was when Alex Polikoff, an attorney with the ACLU, initiated a class action lawsuit against the Chicago Housing Authority (CHA) on behalf of Dorothy Gautreaux, an African-American community organizer and activist living in public housing in Chicago, and five other named tenants. Filed in the same year that King took up residence in Chicago, the lawsuit charged that the CHA had a history of racially discriminatory practices, citing the concentration of nearly all new public housing buildings in Black neighborhoods as a restriction on Black families' access to white neighborhoods. The case was successfully argued before the U.S. Supreme Court, and the resulting settlement required the CHA to develop a desegregation remedy for the metropolitan area.

The *Gautreaux* litigation in Chicago was one of the first major residential desegregation lawsuits in U.S. history and inspired similar lawsuits across the country. As illustrated in Appendix Figure I, in the decades following *Gautreaux*, additional lawsuits aimed at desegregating housing through reforms to public housing or voucher policies were initiated in several cities, including Baltimore (MD), Boston (MA), Buffalo (NY), Cincinnati (OH), Dallas (TX), Memphis (TN), Miami (FL), Minneapolis (MN), New Haven (CT), New York (NY), Omaha (NE), Pittsburgh (PA), Port Arthur (TX), Toledo (OH) and Yonkers (NY). Although the exact desegregation remedies sought in these lawsuits varied, nearly all were influenced by the *Gautreaux* case.

II.B. The Gautreaux Assisted Housing Program

The settlement agreement between the CHA and the plaintiffs in the *Gautreaux* case included a two-pronged approach to address segregation: (1) establish a program to build scattered-site public housing in white neighborhoods that historically lacked public housing, known as the "Gautreaux Demonstration Program", and (2) implement the "Gautreaux Assisted Housing Program," a voucher-based mobility program in which housing counselors would help eligible families move to new neighborhoods throughout the Chicago metropolitan region. While the

[3]King's efforts in Chicago, in collaboration with James Bevel, Al Raby, the Southern Christian Leadership Conference (SCLC), and the Chicago-based Coordinating Council of Community Organizations (CCCO), came to be known as the "Chicago Freedom Movement" or sometimes the "Chicago Open Housing Movement" (though the scope of the movement was much broader than housing and included a focus on employment discrimination, criminal justice disparities, education, and other quality of life concerns).

Gautreaux Demonstration Program only achieved modest scale, primarily due to political opposition in white neighborhoods, the voucher-based Gautreaux Assisted Housing program operated for two decades from 1976 to 1998 and served 7,100 households.

The Chicago-based non-profit, the Leadership Council for Metropolitan Open Communities (the "Leadership Council"), was responsible for administering the Gautreaux Assisted Housing Program. The Leadership Council employed real estate staff and housing counselors to carry out client intake, tenant pre-screening, landlord recruitment, and directed placement activity.[4] Families participating in the program were given a housing voucher that enabled them to rent a unit on the private market.[5] Typically, tenants paid 25 percent of their income in rent, while the voucher covered the difference between the market rent and the family's contribution up to a rent ceiling known as the payment standard.

Families joined the Gautreaux program voluntarily and were eligible for services if they were a member of the plaintiff class, which included existing public housing residents and applicants on CHA's public housing waiting list (Popkin, Rosenbaum, and Meaden, 1993; Polikoff, 2007). Enrollment in the Gautreaux program evolved over time, but followed a general pattern: families seeking assistance through the program could apply during a once-a-year, single-day registration event. Due to excess demand for the program, registration was conducted through a phone-banked dial-in "lottery" in which interested families would attempt to connect with Leadership Council phone operators during a specified period on the registration day.[6] After an initial eligibility screening, successful applicants were invited to an intake briefing at the Leadership Council offices to receive more information about the program.[7]

Throughout its existence, the goal of the Gautreaux program was to desegregate housing by placing families in predominantly white, frequently suburban neighborhoods. The original

[4]The real estate staff were responsible for the following: identifying and developing relationships with landlords in the neighborhoods targeted by the program; recruiting them into participating in the Gautreaux program; identifying new vacancies; and arranging tours of units. Through their efforts, the Leadership Council collected a running list of available apartments. Note that the Leadership Council reduced the size of its real estate staff and families could search on their own for housing during the 1990s. To address concerns over this program reform, Section V.D shows that our conclusions remain the same when we exclude families placed after the reduction in real estate staffing.

[5]Gautreaux families typically received section 8 *certificates* which were an earlier model of today's housing vouchers. For information on differences in program rules, see Olsen (2003) or Collinson, Ellen, and Ludwig (2015).

[6]Registration day events were initially conducted in-person, but Gautreaux administrators were forced to shift to a phone-based system in 1984 due to thousands of families lining-up outside Leadership Council offices in early morning hours before registration opened. Polikoff (2007) writes: "[T]he throng on the sidewalk numbered several thousand and had spilled into the street. Buses had to be rerouted."

[7]At the intake briefings, there were three additional screening criteria applied by the Leadership Council: (1) acceptable credit/rent payment history; (2) no criminal background; and (3) "good house-keeping" (Polikoff, 2007; Peroff et al., 1979). Of these criteria, the most common problem was bad credit (Peroff et al., 1979). During some periods, larger families (four or more children) were also screened-out (Rosenbaum, 1995). If families were deemed eligible based on all criteria, the family also had to provide income-verification from an employer or social worker and two references.

judgment in the Gautreaux case clearly defined two neighborhood options for the plaintiffs (Austin, 1969; Crowley, 1981). First, Census tracts with a Black population share of less than 30 percent were defined as "General Areas." Second, the remaining tracts with Black population share exceeding 30 percent were designated as "Limited Areas." Gautreaux counselors were instructed to prioritize placement in General Areas (Rubinowitz and Rosenbaum, 2000).

While the Leadership Council sought to maximize placements in General Areas, staff faced considerable challenges in finding landlords who were willing to provide apartments in the targeted white, suburban areas (Rubinowitz and Rosenbaum, 2000; Polikoff, 2007). This difficulty in finding suitable apartments significantly slowed the placement of Gautreaux families. In the program's initial year, the Leadership Council planned to relocate around 400 families. However, by the end of the first year, only 168 families had been placed, largely due to the challenge of finding landlords in suburban areas.

Due to the slow pace of relocation in the program's early years, the set of acceptable placement neighborhoods was expanded in 1981 when a consent decree for Gautreaux was signed. The Court recognized that relocating Gautreaux families to General Areas alone would not provide "total relief." Therefore, the new decree allowed up to one-third of the plaintiff class to be placed in "Revitalizing Areas," a new classification for a subset of formerly Limited Areas neighborhoods that were deemed to be undergoing sufficient redevelopment and were expected to be more integrated in the future (Crowley, 1981).[8]

Two key factors determined whether a Gautreaux family was placed in a predominantly white neighborhood (i.e., General Area) or a revitalizing Black area. First, the availability of housing units of the appropriate size in a General Area neighborhood at the time a family was being processed heavily influenced where they were placed (Popkin, Rosenbaum, and Meaden, 1993; Rosenbaum, 1995; Polikoff, 2007). The scarcity of affordable rental housing in General Areas was partially due to housing market conditions. In line with this, Appendix Figure II uses administrative records from Gautreaux to highlight how Gautreaux's placement rate into predominantly white neighborhoods was highly correlated with the broader Chicago rental vacancy rate.[9] Second, a family's position on the registration list from the program's annual single-day registration event also influenced their placement.[10]

Notably, the Leadership Council did not directly consider family preferences when offering housing units to Gautreaux families. Instead, counselors at the Leadership Council offered the first available unit to a family after accounting for basic factors such as family size and transit needs (e.g., families without access to a vehicle might be placed in suburbs closer to

[8]Minority areas could be classified as "revitalizing" if it met one of several criteria such as: undergoing visible redevelopment; being located along the lakefront; accessible to good transportation; had a larger number of buildings up to code standards; accessible to good shopping; or free of an excessive concentration of assisted housing (Crowley, 1981).

[9]The correlation between the annual white neighborhood placement rate and the Chicago vacancy rate is 0.77.

[10]The precise ordering of registration was determined by a family's position in line during an in-person registration event or the timing of when they connected to Leadership Council phone operators during the "phone lottery" (Popkin, Rosenbaum, and Meaden, 1993).

their previous neighborhood in the city of Chicago) (Keels et al., 2005). Although clients were allowed to refuse up to two housing offers for any reason without losing their voucher, the vast majority of families accepted the first unit they were offered: Popkin, Rosenbaum, and Meaden (1993) report that 95 percent of Gautreaux clients accepted their first offer.

III. DATA

Our analysis relies on linking official program records from the Gautreaux Assisted Housing Program to multiple administrative data sets housed at the U.S. Census Bureau. In this section, we describe the sample used in our analysis and define the outcomes that we study. Further details on the sample and data linkage can be found in Appendix Section B.

III.A. Sample of Gautreaux Participants and Data Linkage Process

Our sample is based on historical records of Gautreaux participants from the Leadership Council, which were provided by the U.S. Department of Housing and Urban Development (HUD) and originally collected by Jeffrey Kling. The Gautreaux records contain information recorded at registration for families who received a placement and successfully moved through the program, including information for adults and children in the household. For all individuals, the program files contain names, Social Security Numbers (SSNs), and basic demographic information, such as gender, year of birth, and place of birth. For household heads, we have more extensive information, including gender, marital status, car ownership, driver's license status, employment status, annual earnings, total income, and the number of children in the household. The Gautreaux records also provide information on a household's address at the time of registration and the location of their housing placement through the program.

The name, date of birth, and SSN information in the Gautreaux program records were processed through the Census Person Identification Validation System (PVS) to link our sample of adults and children to a unique Protected Identification Key (PIK). PVS uses probabilistic matching to link individuals to a reference file constructed from the Social Security Administration Numerical Identification File and other federal administrative data (Wagner and Lane, 2014). For the full and children-only samples, 90.2 and 86.2 percent of individuals were successfully assigned to PIKs, respectively. PIKs allow us to link the Gautreaux sample to other restricted data sets held by the U.S. Census Bureau. In Appendix Section B, we provide evidence that there is no detectable association between the likelihood of matching to a PIK and the probability of placement into the predominantly white neighborhoods (i.e., Census tracts designated as General Areas because they had a Black population share less than 30 percent) targeted by Gautreaux.

Our analysis sample is restricted to adults and children who participated in Gautreaux from 1982 to 1994, which is the last year of program data. We focus on individuals who participated after the 1981 consent decree was adopted, even though the program began in 1976. As explained in Section II, the consent degree reformed the program rules regarding

the racial composition of destination neighborhoods by allowing up to a third of participants to be placed in revitalizing Black neighborhoods. Further discussion of this decision is provided in Section IV.

After applying our sample restrictions, the primary analytical sample consists of roughly 4,800 children in Gautreaux families who are assigned a PIK and are at least age 24 by 2019.[11] However, the sample sizes vary across outcomes due to differences in availability of data and differences in child ages at the time of measurement. In Appendix Section B, we evaluate whether appearance in any of our outcomes samples is correlated with placement into a predominantly white neighborhood. Consistently across outcome data sources, we find no evidence that placement is correlated with appearing in our outcome samples.

III.B. Later-life Neighborhood Choices

We use several sources of information to measure the residential location of individuals in the Gautreaux program over time. The Gautreaux program records provide the address of the family at intake and the placement address. After participation in the program, we can observe their location in 2000 from the 2000 Decennial Census, in 2010 from the 2010 Decennial Census, and from 2007 to 2019 from the Master Address File-Auxiliary Reference File (MAF-ARF). The MAF-ARF is a cross-sectional address file that supports Census surveys such as Decennial operations and the American Community Survey (ACS). The person-address linkages in the MAF-ARF come from the IRS, HUD, Medicare, the U.S. Postal Service, and other administrative sources (Finlay and Genadek, 2021).

We define neighborhoods as U.S. Census tracts and focus on the neighborhood characteristics for each address covered in the years of the data. We study tract-level measures of racial composition (i.e., the Black and white population shares) and the poverty rate using the ACS 2015-2019 five-year estimates. Additionally, we use the Opportunity Atlas (Chetty et al., 2018) to characterize upward mobility for each tract. Upward mobility is defined as the average income rank for all children born to parents at the 25th percentile of the income distribution.[12]

Our analysis focuses on long-run neighborhood locations measured in 2019 using the MAF-ARF. Additionally, we derive neighborhood locations for children participants at age 26 using the MAF-ARF for children who were age 26 during the years 2007-2019. In supplementary appendix results, we also investigate impacts on neighborhood locations in 2010 using the MAF-ARF and the 2010 Decennial Census.

[11] In the text and tables, the sample sizes and estimates derived from confidential Census data are rounded according to Census confidentiality rules.

[12] Chetty et al. (2020) measure upward mobility using IRS administrative records on income from 2014–2015 to calculate later-life ranks in the nationwide income distribution for children who grew up in a given Census tract. The measure of upward mobility is specific to the 1978–1983 birth cohorts. For all our analysis, we use the upward mobility measure pooled across races.

III.C. Earnings and Employment

We measure earnings and employment outcomes of Gautreaux participants using the quarterly earnings records from the Longitudinal Employer-Household Dynamics (LEHD) Employment History File. The LEHD is an administrative earnings database that combines earnings records from state Unemployment Insurance (UI) offices with establishment-level data from the Quarterly Census Employment and Wages (QCEW). It covers 98 percent of private-sector employment in the United States (see Abowd, Haltiwanger, and Lane (2004) and Vilhuber (2018) for further details on the LEHD). For this project, we have access to data that covers all 50 states and the District of Columbia. The available years vary by state. The earliest year available for Illinois is 1990, while the majority of states have data from 1995 to 2019.

We construct two types of measures of earnings from the quarterly earnings data: annual and cumulative earnings. For the annual earnings measures, we compute earnings at age 24 and average annual earnings over ages 24–28, 29–33, and 34–38. The sample size decreases with the ages being studied as many cohorts of children placed through Gautreaux are still young. Cumulative earnings are measured by aggregating all observed earnings in the LEHD data for an individual up to age 28, 33, and 38. In the cumulative earnings analysis, we restrict the samples to individuals who were age 24 or younger in 1990 in order to observe their entire adult earnings history in the available years of earnings data (1990-2019). Note that the measures include all earnings for an individual, aggregated across multiple employers when applicable and are winsorized at the 99th percentile. All dollar amounts, including earnings, are expressed in 2018 USD using the CPI-U. However, the employment and earnings records only cover formal employment and exclude individuals not covered by UI benefits, such as the self-employed or those in the informal sector, which appear as zero earners in the data.

III.D. Marriage, Homeownership, and Incarceration

We obtain information on marriage, homeownership, and incarceration using the 2010 Decennial Census Hundred-Percent Detail File. This data source is designed to cover the entire U.S. population but includes only a relatively small set of characteristics. To determine marital status, we use the relationship to the household head. If a Gautreaux participant is the head of household or spouse, we can determine their marital status and the race of their spouse. This allows us to measure the likelihood of marrying a white spouse.

Homeownership is similarly defined for heads and the spouses of household heads in the 2010 Decennial Census. However, we cannot definitively determine whether an individual is a homeowner; instead, we only know that a member of the household owns the home.[13] To define homeownership, we only consider individuals who were 35 years or older at the

[13]Specifically, the Census Bureau asks respondents whether the home is "owned by you or someone in this household."

time of the 2010 Census, since the typical age of first-time homeowners in the U.S. is in the mid-30s (Lautz et al., 2022). To cover a larger sample of Gautreaux children, we create an alternative proxy for homeownership by combining MAF-ARF and 2010 Census records. Specifically, we link MAF-ARF addresses in 2017–2019 to the 2010 Decennial Census and infer ownership based on the historical tenure status of the housing unit (i.e., whether the unit was owned or rented in 2010). Using this data, we focus on persons that are age 35 or older in 2017 and create a flag for whether an individual in our Gautreaux sample ever lived in an owner-occupied housing unit at any point during 2017-2019. We also create a separate measure for the fraction of these years spent living in owner-occupied housing. These measures assume the tenure (owning or renting) status of the housing unit does not change between the 2010 Census and the point when we observe a Gautreaux individual residing there.

For incarceration, we use the definition based on whether the respondent was identified as residing in group quarters at the time of the 2010 Census. This definition will undercount the number of individuals involved with the criminal justice system, as it is a point-in-time measure that is more likely to capture those with longer sentences. Additionally, this definition will misidentify those who reside in different types of group quarters (e.g., hospitals). However, considering the age range of the Gautreaux children (a non-elderly population), they are more likely to be incarcerated than to be residing in other common forms of group quarters, such as nursing homes. Yet, it is possible that we may be capturing individuals in shelters or dorms when using this measure of incarceration.

III.E. Mortality

We measure all-cause mortality using the Census Numident file, which is derived from Social Security data. The Numident includes administrative records of the date of death for all individuals with social security numbers in the United States. It is considered a comprehensive set of death records for those who are successfully linked to a PIK and closely matches published CDC death statistics (Finlay and Genadek, 2021). The data allows us to observe mortality up to 2020.[14] In the final year of the Numident, our sample of Gautreaux children range in age between 23 to 56. Since death is a relatively rare outcome for those under 60 years old, we use a simple indicator of death at any time up to the end of the sample, without age or other adjustments.

IV. EMPIRICAL STRATEGY

The focus of our analysis is to estimate the effects of neighborhood racial and economic characteristics on the long-run outcomes of Black children from disadvantaged households. In general, the primary obstacle to credible identification of such impacts is the selection problem generated by systematic sorting of families into neighborhoods. Hence, basic comparisons

[14] We limit mortality up to the first quarter of 2020 to exclude COVID-related deaths.

between Black children from families that do and do not move to predominantly white, low-poverty neighborhoods may be confounded by unobserved household differences.

The Gautreaux Assisted Housing Program represents a potentially promising setting in which there are plausibly exogenous moves to neighborhoods that are more racially mixed and less impoverished. Unlike typical moves made by households on the private market, Gautreaux families generally did not search for housing themselves. Instead, the Leadership Council found available units for Gautreaux families and pre-screened families before applying to ensure they would be approved. Moreover, the Leadership Council typically offered the first available unit to families coming off the waiting list regardless of their preferences and with only minimal considerations about their circumstances. Finally, the scarcity of available units in the predominantly white neighborhoods targeted by the program meant that the Leadership Council would ultimately need to place some Gautreaux families in revitalizing Black neighborhoods, creating differences in placement among a population that was interested in moving to largely white communities.

Although Gautreaux has useful features for identifying causal impacts, previous research has raised concerns about the degree to which placements through the program were truly exogenous. Specifically, Votruba and Kling (2009) and Keels et al. (2005) find evidence that neighborhood placements through Gautreaux were correlated with a family's intake neighborhood characteristics. This pattern can be reconciled with historical accounts of the Leadership Council staff factoring in geographic proximity, as it relates to client transportation needs, when placing Gautreaux families (Popkin, Rosenbaum, and Meaden, 1993; Rosenbaum, 1995; Polikoff, 2007). Indeed, consistent with historical accounts, Gautreaux clients were statistically more likely to be placed in a predominantly white neighborhood (i.e., a neighborhood with Black population share less than 30 percent) if they lived further from the city center (see Appendix Figure III).[15]

Our empirical strategies attempt to isolate plausibly exogenous variation in Gautreaux placements by departing from prior studies of Gautreaux in two main ways. First, we focus on the period after program rules changed in 1981 to open up revitalizing Black neighborhoods as placement options in response to the scarcity of housing in suburban areas of Chicago. Second, we directly account for the Leadership Council considering the proximity of clients to placement addresses by using origin tract fixed effects. Intuitively, our approach makes relatively narrow comparisons and relies on the idea that Gautreaux families from the same origin neighborhood placed in neighborhoods with different racial composition are otherwise comparable. In the next section, we assess the plausibility of this assumption using the observable information on family characteristics measured before placement.

Formally, our main analysis estimates the effects of moving to placement neighborhoods designated as General Areas, which we refer to as a desegregating move. Given this definition,

[15]Additionally, Appendix Figure IV shows that Gautreaux families were considerably more likely to be placed in apartments closer to their original address than in apartments further away.

we estimate the following specification:

$$Y_i = \alpha + \beta 1(ShareBlack_{d(i)} < 0.30) + \psi_{o(i)} + \delta_{r(i)} + X_i'\gamma + \epsilon_i, \quad (1)$$

where Y_i is a post-relocation outcome for child i, such as earnings at age 24. The indices $o(i)$, $d(i)$, and $r(i)$ are the origin neighborhood, destination neighborhood, and registration (intake) period for individual i. The designated "treatment" group in this specification is the set of children whose family experienced a desegregating move. This is captured by the indicator $1(ShareBlack_{d(i)} < 0.30)$ which equals 1 if individual i's family received a neighborhood destination placement in a Census tract which was less than 30 percent Black. The "control" group in our framework is the set of children whose family received placements in revitalizing Black neighborhoods. The terms $\psi_{o(i)}$ and $\delta_{r(i)}$ are fixed effects for the origin neighborhood and registration (cohort) year, respectively. To improve precision, the model includes a vector X_i which controls for individual and family characteristics recorded at the time a household registered: gender, year of birth, place of birth, characteristics of the household head such as their gender, marital status, the number of bedrooms required, whether they have a car, have a license, are working, earnings, total income, and the number of children.

The main parameter of interest is the coefficient β which represents the impact of experiencing a desegregating move through the Gautreaux program. This is a reduced form parameter that reflects the combined effects of changing a broad set of neighborhood characteristics for the designated treatment group of children. As we show in Section V.A, there are significant contrasts between the treatment and control children in terms of the neighborhood racial and economic conditions of their initial program placement.

IV.A. Validation of the Main Specification

As discussed above, identifying the effects of racial and economic desegregation is complicated by the fact that minority families who typically make such moves differ from other families on several dimensions. To illustrate this point, we construct an "endogenous movers" sample of low-income Black families with children in the Chicago region who responded to the 2000 Census and moved between 2000-2005.[16] Using this sample, we individually regress pre-move (baseline) characteristics measured in the 2000 Census on an indicator for whether the household head moved to a Census tract with less than 30 percent Black population share and origin Census tract fixed effects. This is in line with our main empirical approach with the Gautreaux sample that focuses on the effects of moves to neighborhoods designated as General Areas (i.e., a predominantly white community). We focus on individual characteristics in the 2000 Census that correspond to the information available in the

[16]Specifically, we start by linking respondents to the 2000 Census long-form respondents who were Black and lived in the Chicago area to the Census MAF-ARF to identify a sample of movers. We then restrict the resulting sample to households with incomes below 80 percent of Area Median Income to approximate the housing voucher-eligible population. As a final step, we draw a random sample which approximates the total number of households in our Gautreaux sample.

Gautreaux program records.

The results in Table I show that household pre-move characteristics are highly correlated with the likelihood of moving to predominantly white neighborhoods in a non-experimental sample. Column (2) reports estimates of the differences in baseline characteristics between families that move to predominantly white versus high-share Black neighborhoods after conditioning on baseline tracts. Black families who move to the former areas have significantly higher earnings, income, and marriage rates. The estimated differences are substantial relative to the mean for the comparison group in column (1). A joint orthogonality test rejects the hypothesis that the two groups are the same with a p-value of less than 0.01.

In contrast to these results for the endogenous sample of movers, Gautreaux families treated by having placements in predominantly white neighborhoods have similar pre-move (baseline) characteristics to their counterparts from the same neighborhood who were placed in revitalizing Black neighborhoods. The two right-most columns of Table I report the results from a balance analysis for Gautreaux using a slightly larger set of characteristics measured at registration for household heads and more limited set of characteristics available for children. Column (3) shows the average baseline characteristics for our designated control group, the Gautreaux families receiving placements in revitalizing areas. In column (4), we report estimates of the difference in a given baseline characteristic between treatment and control Gautreaux families after conditioning on origin and cohort fixed effects.[17] The estimated differences are consistently small in economic terms, and none of them are statistically significant. Moreover, we fail to reject the null hypothesis in a joint orthogonality test with a p-value of 0.535. Overall, the results in this section support the idea that Gautreaux placements were unique in producing moves that were uncorrelated with baseline characteristics after accounting for factors considered by Leadership Council staff in placing families.[18]

IV.B. Exposure Specifications with Household Fixed Effects

As noted above, the key identifying assumption of our main approach is that receiving a desegregating neighborhood placement is uncorrelated with a family's characteristics after conditioning on the basic factors considered by housing counselors. While our balance analysis does not provide evidence of any violations of this assumption, we can also rely on a weaker identifying assumption to learn about the long-run impacts of moves to the predominantly white, low-poverty neighborhoods targeted by Gautreaux. Specifically, we

[17] Specifically, we report estimates of β from the following general specification: $X_i = \alpha + \beta 1(ShareBlack_{d(i)} < 0.30) + \psi_{o(i)} + \delta_{r(i)} + \epsilon_i$.

[18] Appendix Table I provides additional balance results using predicted measures of child outcomes (i.e., earnings in adulthood and later-life neighborhood Black share) as the dependent variables in a model that includes a *continuous* placement neighborhood characteristic in addition to the controls and fixed effects that we use in equation 1. The predicted measures are based on a model that is estimated using control group children (i.e., those placed in a revitalizing neighborhood) and predicting the given later-life outcomes using the baseline characteristics listed in Table I. Reassuringly, we find no significant relationship between the predicted measures and each of the continuous placement neighborhood characteristics that we consider.

can use a household fixed effect approach to compare younger and older siblings, which controls for permanent family unobservables. The motivation behind a household fixed effects approach in our Gautreaux setting is based on previous evidence that suggests that the duration of childhood exposure to a new neighborhood determines the magnitude of impacts on long-run outcomes (Chetty, Hendren, and Katz, 2016; Chyn, 2018; Chetty and Hendren, 2018).

Formally, our household fixed effects approach is based on the following specification:

$$Y_i = \pi + \theta 1(Age_i < 10) \times 1(ShareBlack_{d(i)} < 0.30) + \lambda 1(Age_i < 10) + X_i'\gamma + \mu_{h(i)} + \varepsilon_i, \quad (2)$$

where this model includes an indicator $1(Age_i < 10)$ which is equal to 1 if individual i was less than age 10 at the time of registration as well as an interaction between this indicator and the treatment indicator for experiencing a desegregating move. We focus on age 10 since this is the 75th percentile of child ages in our sample. The controls included in the vector X_i are gender, place of birth, and year of birth fixed effects. Importantly, $\mu_{h(i)}$ is a household fixed effect for household $h(i)$ which is the same for all children from the same household. We also estimate a linear exposure model that replaces the indicator $1(Age_i < 10)$ with a continuous measure of age.

Our primary focus is on estimates of the parameter θ. Including household fixed effects ensures this parameter is identified by comparing differences in outcomes for children from the same household. While this approach addresses concerns that fixed family unobservables may drive neighborhood selection, a causal interpretation of our estimates depends on the assumption of no time-varying family unobservables. In Section 2, we assess the importance of time-varying factors at the family level by analyzing the outcomes of Gautreaux parents.

IV.C. Comparing the Effects of Neighborhood Racial Versus Economic Characteristics

A natural alternative to our main approach is to estimate models that isolate the distinct impact of key placement neighborhood characteristics. This is feasible in the Gautreaux context because there is wide variation in neighborhood placements resulting from the fact that families were placed in many different neighborhoods throughout Chicago and the broader metropolitan area. Motivated by the broader neighborhood effects literature (Clampet-Lundquist et al., 2011), we concentrate on isolating the role of neighborhood race from that of neighborhood economic conditions.

For this analysis, we use the following specification that allows for placement neighborhood race and poverty rates to have separate impacts:

$$Y_i = \alpha + \pi ShareBlack_{d(i)} + \tau PovertyRate_{d(i)} + \psi_{o(i)} + \delta_{r(i)} + X_i'\gamma + \epsilon_i, \quad (3)$$

where $ShareBlack_{d(i)}$ and $PovertyRate_{d(i)}$ are measures of the share of population that is Black and the poverty rate for an individual's destination neighborhood, respectively. To aid interpretation, we converted the underlying demographic and economic neighborhood

measures into standardized (z-score) values. This specification is most directly comparable to the "horse race" specifications used in Ludwig and Kling (2007) to explore youth criminal behavior and neighborhood effect mechanisms within the MTO experiment. Due to collinearity, we limit our analysis to a model that features only two placement neighborhood characteristics as independent variables.[19]

V. RESULTS

We begin our presentation of results on the long-run effects of Gautreaux on children with graphical analysis that previews our main findings for economic and social outcomes. First, Figure I, Panel A, reports a series of binned averages that illustrate the relationship between earnings measured at age 24 for our sample of children and their family's placement neighborhood share of white residents. To construct the figure, we compute residuals for both the earnings and placement neighborhood white share after accounting for registration cohort, birth year, and origin neighborhood fixed effects. We then divide the residuals of the placement neighborhood white share into 18 equal-sized bins, add the overall means of each measure for interpretation, and plot the resulting binned averages.

The results in the figure show clear evidence that children placed in neighborhoods with a higher share of white neighbors are earning notably more at age 24. The coefficient from a linear regression estimated on the individual level data shows that a 10 percentage point increase in neighborhood white share is associated with a $346 increase in annual earnings.

Next, we conduct a similar graphical analysis where we shift our focus to the later-life neighborhood choices of children. Panel B of Figure I is a similar residual-based plot where the outcome is a child's neighborhood (Census tract) share Black as measured in the MAF-ARF records. In 2019, three to four decades after the Gautreaux program relocated families, we find children who relocated to neighborhoods with higher white shares are living as adults in neighborhoods that have significantly fewer Black neighbors. The results from a linear regression imply that a 10 percentage point increase in neighborhood white share during childhood is associated with a 1.6 percentage point reduction in the later-life neighborhood Black share.

This graphical analysis also provides evidence that supports a causal interpretation of these semi-parametric results. Both Panels A and B of Figure I also plot the predicted earnings and later-life neighborhood Black share based on only pre-placement individual and household characteristics (as hollow circles). Consistent with the evidence of balance in Section IV.A, we see no systematic relationship between the predicted measures and the white share in the Gautreaux placement neighborhood. The underlying linear regressions for predicted earnings and later-life Black share imply that a 10 percentage point increase in neighborhood share white is associated with a $14 increase in predicted annual earnings and less than a tenth of a percentage point reduction, respectively, and neither coefficient is

[19] Appendix Table II shows that correlations between placement neighborhood characteristics are generally high.

statistically significant.

V.A. Effects of Desegregating Moves

In this section, we report our main regression estimates of the effects of experiencing a desegregating move by relocating to a predominantly white neighborhood through Gautreaux. As noted above, these estimates reflect the combined effects of reducing both racial and economic segregation. To aid the interpretation of our reduced form impacts, Table II provides an initial assessment of how desegregating moves shaped a broad set of placement neighborhood characteristics measured in the 1980 Census. We conduct this analysis using the sample of Gautreaux household heads and specifying the outcomes as the placement neighborhood's racial composition, poverty rate, and predicted child income rank in adulthood. Columns (1) to (4) report estimates for each outcome based on equation 1. For comparison, the first row below the estimates reports the mean of each outcome for our designated control group, the Gautreaux families placed in revitalizing Black neighborhoods.[20]

The pattern apparent from Table II is that desegregating moves through Gautreaux had relatively large impacts on a range of neighborhood characteristics. By design, these moves substantially changed the neighborhood racial composition experienced by Gautreaux families. On average, the treatment group moved to tracts where the non-Hispanic white population share was 72 percentage points higher relative to control families. We also find statistically significant reductions in neighborhood poverty rates (20 percentage points) and improvements in the predicted later-life income rank of children (10.7 percentiles).

In addition to studying neighborhood characteristics, we explore how being placed in a predominantly white neighborhood impacted the types of schools that Gautreaux children could attend. For this analysis, we link all households to the closest school near their placement address and focus on several measures, including school racial composition, district-level spending per pupil, and class size provided by the National Center for Education Statistics (NCES). While our sample received neighborhood placements as early as 1981, the NCES measures are available only in the late 1980s and 1990s. We use the earliest year available for each school characteristic.[21]

In Appendix Table III, we find large effects on school racial composition and more muted impacts on measures of school quality. On average, treated families moved to neighborhoods near schools where the Black student population share was about 74 percentage points lower and the white share was about 50 percentage points higher. These large impacts are consistent with residential segregation playing an important role in determining school racial

[20]Since all families in the Gautreaux program move, we can also compare neighborhood characteristics before and after relocating for families in the control and treatment groups. Appendix Figure V reports these average changes for each group, respectively.

[21]We use school-level racial composition and class size measures from the 1987-1988 and 1986-1987 academic years, respectively. For district-level spending per pupil, we use data from the 1991-1992 academic year.

composition.[22] However, we find evidence of only modest increases in school quality. For district spending per pupil, the estimated effect indicates an increase of $62 (1 percent) that is not statistically significant. The impact on class size is more clear and indicates treated households moved to areas with 0.793 (3.8 percent) fewer students per class.

Effects on Economic Outcomes. Next, Table III reports our estimates of the effects of desegregating moves on long-run economic outcomes. The top panel begins with our labor market analysis, and columns (1) to (3) provide estimates for average annual earnings measures from various ages in adulthood. All estimates are based on equation 1. We provide additional results in Appendix Table IV which show that our earnings results are essentially unchanged across alternative specifications that vary whether origin tract or individual level controls are included.[23]

These results show that being placed in a predominantly white neighborhood during childhood substantially boosts the later-life earnings of Gautreaux children. In column (1), we find an estimated impact of $2,341 on earnings during ages 24-28. Relative to the control group mean of $11,570, this effect reflects a 20 percent increase for treated children. These estimates for earnings are in line with recent findings on the effects of moving to lower poverty, racially segregated neighborhoods through the MTO demonstration (Chetty, Hendren, and Katz, 2016) or due to public housing demolition (Chyn, 2018). We provide a more detailed comparison of our effects with prior studies in Section VI.

Columns (2) to (3) suggest that the estimated impacts are generally comparable and remain statistically significant when we measure earnings using the averages between ages 29-33 or ages 34-38. The effect sizes decline slightly as the control group mean increases with age. These effects on earnings are driven, in part, by extensive margin responses on the likelihood of employment, as demonstrated in Appendix Table VIII. In terms of heterogeneity, Appendix Table IX shows that the earnings point estimates for boys and girls are similar.

The middle panel of Table III reports impacts on cumulative earnings accumulated up to relatively advanced ages. This analysis of total earnings is limited to a smaller sample since our approach imposes the restriction that each child's entire early adulthood earnings history is observeable and must be younger than age 24 in 1995 (the first year of the LEHD earnings data). Gautreaux children who were treated have accrued substantially more earnings than their peers placed in revitalizing Black neighborhoods. In particular, we find that they have earned $16,910 more by age 28, $24,980 more by age 33, and $34,090 more by age 38.

Given the sizeable increases in earnings for the treated children, it is plausible that desegregating moves could impact the household wealth of Gautreaux children. The literature

[22]During our period of interest, school desegregation efforts had little impact on student body composition in Chicago. In 1980, a series of legislative decisions placed Chicago Public Schools (CPS) under a consent decree and court mandated desegregation plan. Despite these efforts, about 75 percent of Black students enrolled in CPS still attended a school that was predominantly Black in 1989 (Jankov and Caref, 2017).

[23]Across all economic and social outcomes that we consider, this general pattern remains: the estimated impacts of desegregating moves do not meaningfully change if we exclude origin tract or individual controls in the specification. See Appendix Tables V, VI, and VII.

consistently documents significant Black-white disparities in wealth (Barksy et al., 2002; Charles and Hurst, 2002; Aliprantis, Carrol, and Young, 2019; Derenoncourt et al., 2024) and persistent racial differences in homeownership rates (Collins and Margo, 2011; Logan and Parman, 2017). Motivated by these gaps, and the fact that lower income households typically hold much of their wealth in the form of housing (Kuhn, Schularick, and Steins, 2020), we examine impacts on homeownership using data from the 2010 Decennial Census. Our analysis is uniquely suited to study homeownership given that the typical age of first-time homeowner in the U.S. is mid-thirties (Lautz et al., 2022) and a substantial fraction of our sample of children have reached age 35 by the time of the 2010 Decennial Census (where we can observe ownership).

We find that treated Gautreaux children are substantially more likely to be homeowners as adults. The bottom panel of Table III reports impacts on homeownership in the 2010 Decennial Census and two proxies for homeownership. Column (1) shows that Gautreaux children placed in predominantly white neighborhoods are about 10 percentage points more likely to be a homeowner than children placed in revitalizing Black neighborhoods. To broaden the sample for our analysis, columns (2) and (3) present results for two proxies for homeownership that we constructed by linking the addresses in the MAF-ARF to flags for tenure from the 2010 Census.[24] We find that treated children are more likely to be living at a unit in 2017-2019 which was owner-occupied in 2010 and spend a greater fraction of time living in units likely to be owner-occupied. Taken together, these results suggest that desegregating moves increased not just the adult earnings of children but also their wealth accumulation and access to homeownership.

Effects on Social Outcomes. Moves through Gautreaux may have also shaped the social outcomes of children, such as later-life residential segregation and marriage. Any impacts on these outcomes could be driven by the labor market outcomes and wealth effects discussed in the previous section, but also may be determined by a range of non-economic factors. Prior research has suggested that neighborhoods may play an important role in shaping norms and identity (Case and Katz, 1991; Akerlof and Kranton, 2000; Bertrand, Luttmer, and Mullainathan, 2000; Rickford et al., 2015) in addition to playing a role in determining social networks (Huckfeldt, 1983; Bayer, Ross, and Topa, 2008; Chetty et al., 2022). Moreover, a large literature on the contact hypothesis—primarily based on schooling contexts—suggests that greater exposure to other racial or social groups can shape attitudes and beliefs (Allport, 1954; Rao, 2019; Merlino, Steinhardt, and Wren-Lewis, 2019; Carrell, Hoekstra, and West, 2019; Mousa, 2020; Billings, Chyn, and Haggag, 2021).

We begin by investigating the treatment effects of Gautreaux on the neighborhoods where children reside in adulthood. In Table IV, columns (1) to (4) report impacts on neighborhood characteristics in 2019 using the MAF-ARF.[25] To characterize neighborhoods, we initially

[24]Because the MAF-ARF is available through 2019, we can focus on children who are old enough to be homeowners in 2019 but may also be too young to reasonably be homeowners in 2010.

[25]In Appendix Table X, we explore the robustness of our results by studying location outcomes in an

focus on three standard Census tract measures of demographics and economic measures: the Black population share, the white population share, and the poverty rate.

We find that desegregating moves significantly shape later-life neighborhood choices. Column (1) shows that in 2019, three to four decades after the Gautreaux program relocated families, treated children were living in neighborhoods roughly 10 percentage points less Black than those in comparison the group. These results are consistent with our graphical, non-parametric results presented in Figure I. In addition to living in less segregated neighborhoods, the results in column (3) indicate that treated children are living in neighborhoods with 2.5 percentage point lower poverty rates.

These results for later-life neighborhood choices may translate directly into multigenerational impacts. That is, the *next* generation born to the children of Gautreaux households may also have improved economic outcomes in the future. To examine this possibility, we use the mean income rank in adulthood for a child born to parents in the 25th percentile of the income distribution from Opportunity Atlas (Chetty et al., 2018) to characterize neighborhood income mobility.

We find in column (4) of Table IV that treated children are living in adulthood in neighborhoods with 2 percentiles higher predicted income rank than children placed into revitalizing Black neighborhoods. Given that the average control group child lives in a neighborhood where poor children typically reach the 37th percentile ($27,850), a move to a neighborhood where the typical poor child reaches the 39th percentile ($29,950) amounts to a $2,100 a year improvement in adult earnings.

It is reasonable to wonder whether these effects on later-life neighborhood characteristics reflect underlying propensities to live in close proximity to the area where one grows up. To evaluate this interpretation, we conduct three exercises. First, we examine whether being placed in a predominantly white neighborhood makes an individual more likely to have a later-life Census tract that matches the tract where they were originally placed as children. Appendix Table XI shows that there are no detectable impacts on the tendency of children to live in the same neighborhood in adulthood. Second, we re-estimate our main specification excluding children who still live in their placement tracts as adults, and the results look quite similar to our baseline specification. Finally, our third test, detailed further in Section 2, studies co-location with parents as a possible driver of our results. The findings from this test do not indicate that co-location is a potential mechanism.

Next, we analyze impacts on marriage behavior as another domain likely to be influenced by social interactions and neighborhoods. Our analysis is motivated by the significantly lower marriage rate among Black households compared to white households (Charles and Luoh, 2010). Wilson (1987) suggests that this marriage rate gap is attributable in part to the relatively high rates of unemployment and incarceration for Black Americans. The impacts of desegregating moves on economic outcomes documented above may have improved

alternative time period using two different data sources. The results are similar when we study location in 2010 and measure outcomes using the Decennial Census and the MAF-ARF.

marriage prospects for children in our sample. In addition, the experience of growing up in a majority white neighborhood may have shifted children's norms regarding marriage or their opportunities to interact with potential spouses of another race.

Table IV reports effects on marital status and partner choice measures from the 2010 Decennial Census. Column (5) shows that treated children are 5.9 percentage points more likely to be married in adulthood. We also find in column (6) that moves to predominantly White areas increase the likelihood of marrying a white spouse by 2.1 percentage points, an approximate doubling relative to the rate observed for the control group of children moving to revitalizing Black neighborhoods. The large effect size that we find is driven partly by the fact that the Black-white marriage rate for children in our Gautreaux control group is just 1.7 percent. Prior literature has highlighted the generally low rates of interracial marriage in the U.S. (Fryer, 2007). Our low rates of Black-white marriage are consistent with recently documented national statistics that show only 2.1 percent of Black individuals are married to a white spouse by age 30 (Goldman, Gracie, and Porter, 2024).

Effects on Health and Incarceration. Finally, we examine the effects of desegregating moves on mortality and incarceration. Our analysis of these outcomes builds on prior research on the Gautreaux program. Votruba and Kling (2009) study mortality up to age 30 for a sample of young males who were under age 25 at the time of placement through Gautreaux. Keels (2008) focused on arrest outcomes up to age 29 for a sample of Gautreaux children who could be linked to local police records in Illinois.

Appendix Table XII shows that we find no statistically significant impacts on mortality or incarceration in the pooled sample of boys and girls. Both point estimates are less than one-half of a percentage point. Given existing work on gender differences in health and criminal behavior, the remaining results report separate estimates for boys and girls. While no individual estimates are precisely estimated, it is worth noting that the results for male mortality are broadly consistent with prior work by Votruba and Kling (2009). The point estimate suggests that Gautreaux boys who were placed in predominantly white neighborhoods were 2.5 percentage points (38 percent) less likely to have died by 2019.

V.B. Effects of Racial Desegregation Versus Economic Desegregation

The prior section reported estimates of the reduced form effects of desegregating moves on children's outcomes in adulthood. As noted above, these placements through Gautreaux reflect the combined effects of reducing both racial and economic segregation. An alternative is to estimate a model that attempts to disentangle the separate effects of individual neighborhood characteristics that may be driving these collective impact. This analysis is possible given that placement neighborhood characteristics varied across many dimensions. For example, two families may have been placed in neighborhoods with the same racial composition but different poverty rates. Using equation 3, we can leverage this type of variation across placement neighborhoods to separately identify the effects of neighborhood

race and economic conditions.[26]

Table V reports results from our horse-race analysis of the effects of initial placement neighborhood race and poverty rates on average annual earnings at ages 24-28 and later-life neighborhood share Black in the top and bottom panels, respectively. Columns (1) and (2) provide initial benchmark estimates from models where a standardized measure of the placement neighborhood share white or the poverty rate is the only characteristic included in the specification. Column (3) provides results from our preferred model based on equation 3 that features both placement neighborhood characteristics.

For our earnings measure, we find a nuanced pattern of results. As expected, the benchmark estimates based on models that only include one neighborhood characteristic show that racial composition and poverty rates are strongly linked to children's earnings in adulthood. The estimate in column (1) shows that a one standard deviation change in the share of white residents in the placement neighborhood significantly increases earnings by approximately $591 at ages 24-28. Similarly, the results in column (2) imply that a one standard deviation increase in neighborhood poverty rates reduces this measure of earnings by $953. When both placement characteristics are included in column (3), each of the estimated coefficients attenuate, and the standard errors increase considerably. At face value, the fact that the point estimates for the poverty rate are consistently larger-in-magnitude makes a case for the idea that local area poverty rates play a more important role for later-life earnings of children. That said, a key caveat is that only the result for neighborhood race is significant at the 10 percent level in our specification that controls for both characteristics.

For later-life neighborhood racial composition, the results provide clearer evidence that initial placement neighborhood racial and economic characteristics have distinct impacts.[27] In line with our results from Figure I, column (1) shows that increases in the placement neighborhood share white significantly reduce the share of Black residents in a child's later-life neighborhood. We also find a detectable and large impacts of neighborhood poverty rates in column (2). When both measures are included in the horse race specification, column (3) shows that the estimated coefficient on neighborhood white share remains strongly significant while the coefficient on poverty attenuates substantially. This demonstrates that neighborhood racial composition matters for future neighborhood racial composition even

[26]While our main analysis uses the Census tract poverty rate in 1980 as a standard measure of economic conditions, recent research by Chetty et al. (2018) and Chetty et al. (2022) has produced novel measures of predicted economic opportunity and social connectedness at the neighborhood level. In Appendix Table XIII and Appendix Figure VII, we show that placement into neighborhoods with higher later-life income rank and greater levels of economic social connectedness (i.e., the extent to which low- and high-socioeconomic status individuals are friends with each other) has large and significant positive impacts on average earnings during ages 24-28 in our Gautreaux sample.

[27]We also conduct a horse-race analysis for another key social outcome: the likelihood of being married to a white spouse. Appendix Table XIV shows that the standardized placement neighborhood share white has a large and statistically significant impact on interracial marriage. The point estimate for the standardized poverty rate is one-third the magnitude of the effect for neighborhood race.

after controlling for poverty rates.[28]

V.C. Additional Mechanisms

School Quality. A natural question is whether the mechanism driving the effects of desegregation documented above is related to changes in school quality rather than the shifts in neighborhood race or economic conditions. To assess school changes as a mechanism, we conduct two exercises. First, we use prior studies for evidence on the effects of changing educational inputs to perform a back-of-the-envelope calculation. Second, we estimate an augmented version of equation 1 that allows school characteristics and placement neighborhood racial composition to have independent impacts.

In our first approach, we rely on studies of court-ordered *school* desegregation. Johnson (2011) and Anstreicher, Fletcher, and Thompson (2022) find that efforts to desegregate schools from the 1960s to the 1980s significantly increased average per pupil spending and reduced class size at the schools most likely attended by Black children. In addition to these effects on schooling inputs, both studies also find that Black children experienced large improvements in the long-run labor market earnings due to school desegregation.

Using a back of the envelope calculation, we find changes in school quality play a limited role in our setting. We compare our estimates of the impacts of Gautreaux placements on school inputs from Appendix Table III to the impacts of schooling inputs from court-ordered school desegregation and find significantly more modest effects in Gautreaux. Specifically, Anstreicher, Fletcher, and Thompson (2022) use Census data and find that school desegregation orders increased average per pupil school spending by about 40 percent and increased labor market earnings by 30 percent for Black children.[29] These estimates imply an elasticity of 0.75 if the impact of school desegregation arises only due to changes in school quality. Based on this elasticity and our results from Appendix Table III, it appears that the roughly 1 percent change in school quality due to Gautreaux would be expected to increase earnings in adulthood by 0.75 percent. This effect is much smaller than the nearly 20 percent effect that we detect in Table III and suggests that changes in school spending can only account for a small fraction of the effects we detect on earnings.

Next, we augment equation 1 by including measures of district-level spending per pupil and class size (based on the school nearest their placement address) as additional controls. Appendix Table XV reports results where the dependent variable is annual average earnings during ages 24-28. Column (1) reproduces our main estimate for the effect of desegregating moves from Table III for comparison. The remaining columns (2) and (3) in Appendix Table XV report estimates of the same parameter from models that add pupil per teacher ratio and

[28] As previewed in Section IV, the attenuation of the point estimates and increases in the standard errors reflects a high degree of collinearity between racial and economic neighborhood characteristics. Previous research based on analysis of Gautreaux notes that the high correlation between economic and social neighborhood conditions creates challenges for identifying independent effects in a model that features several local area characteristics (Votruba and Kling, 2009).

[29] Using the PSID, Johnson (2011) reports similar estimated impacts of school desegregation.

spending per pupil, respectively. Consistent with prior work by Jackson, Johnson, and Persico (2016), our results suggest that increased spending is associated with higher earnings in adulthood. Importantly, our estimates of the effects of moving to a predominantly white neighborhood change little when we control for class size or per pupil spending measures. Together, these exercises suggests that our estimates of the reduced form effects of Gautreaux on long-run child outcomes are unlikely to be driven primarily by changes to the schooling environment.

Parents. In addition to mechanisms related to the characteristics of their neighborhood, children who moved to predominantly white neighborhoods may have benefited due to changes in the behavior of their parents. For example, treated Gautreaux parents may have had better labor market outcomes after relocating and used the additional household income to invest in child development. To test whether parental channels could drive our main findings documented above, Table VI studies the earnings, marriage, and location outcomes of parents and household heads of Gautreaux children.[30]

Broadly, we find little evidence of impacts of desegregating placement on the outcomes of parents. In contrast to our results for children, we find no statistically significant impacts on earnings. While the effects on labor market earnings are positive, they are consistently smaller than the point estimates that we find for children. The estimate for average annual earnings at ages 48-52 is $300—just 2 percent of the control group mean. We also find no statistically significant impacts on measures of cumulative earnings (see Appendix Table XVII).

These earnings results in Table VI align with prior studies the effects of local area conditions on economic outcomes for adults. Previous work studying voucher-based moves through the MTO experiment or due to displacement stemming from public housing demolition found few meaningful effects on the labor market outcomes of adults (Kling, Liebman, and Katz, 2007; Chyn, 2018). The similar lack of impacts for Gautreaux parents further demonstrates that moves within a city or metropolitan area may not be sufficient for generating notable improvement in contemporaneous economic outcomes for adults.[31] Instead, as emphasized in Chyn and Katz (2021), moves to higher-wage areas or otherwise stronger labor markets may be more influential for adult economic outcomes.[32]

[30]We also link parents to the Numident records and report estimated impacts on parent mortality in Appendix Table XVI. There are no statistically significant impacts although the point estimates consistently indicate reductions (i.e., improvements) in mortality.

[31]It is worth noting that moves through the Gautreaux program covered a longer distance relative to the moves in the MTO voucher demonstration. For instance, 73 percent of Gautreaux participants that moved to predominantly white neighborhoods moved more than 10 miles. In contrast, only 16 percent of MTO households in the experimental voucher treatment group made at least a 10-mile move (Kling, Liebman, and Katz, 2007). Overall, the results for labor market outcomes of adults in Gautreaux provide evidence against critiques of MTO that suggested the limited distances covered by MTO moves worked against the detection of neighborhood effects (Sampson, 2008).

[32]While moves within a city may not substantially shift labor market activity for adults, the existing literature does find important impacts on measures of health and well-being (Ludwig et al., 2012; Chyn and

Our analysis also finds no evidence of impacts of desegregating moves on the marital status or wealth (as proxied by homeownership) of Gautreaux household heads. The middle panel of Table VI shows there are no statistically significant treatment effects on marital status and homeownership, as measured in the 2010 Decennial Census. These results directly suggest changes in parental circumstances in terms of marriage or wealth (as proxied by homeownership) are unlikely to drive the pattern of results that our main analysis finds for children. In addition, these results could also be viewed as evidence suggesting that placement into predominantly white neighborhoods was also uncorrelated with latent propensity of Gautreaux heads to become homeowners or to be married.

The main exception to the null impacts that we estimate for adults is a pattern of persistent effects on long-run neighborhood locations. The bottom panel in Table VI reports estimates of the impacts on the neighborhood location of Gautreaux adult household heads in 2019. The results show that treated Gautreaux household heads were living in tracts that were about 14 percentage points less Black and 8 percentage points more non-Hispanic white nearly four decades after they originally moved through the Gautreaux program.

Given this persistence in the effects of initial placement on future neighborhoods of household heads, a natural consideration is whether the effects on children's later-life neighborhood locations are driven by co-location with their parents or caregivers. We evaluate this possibility in two ways. First, we regress an indicator for living in the same Census tract as one's parent in 2019 on our indicator for treatment. Appendix Table XI shows no evidence that children placed into predominantly white neighborhoods are more likely to live around their parents in adulthood. Second, we remove children living in the same tract as their parents or caregiver in 2019 from our analysis and re-estimate our neighborhood results in Appendix Table XVIII. Our results look remarkably similar if we exclude children that are co-locating with their parents or caregivers. These results imply that the impacts we observe on children's neighborhood choices in adulthood are unlikely to be driven by co-location considerations.

V.D. Robustness Exercises

This section presents results from three exercises that address potential concerns for the interpretation of our results. First, we provide alternative estimates of the impact of desegregating moves based on a household fixed effects approach. As discussed in Section IV, the argument for causal interpretation of the results from our main approach in equation 1 relies on the assumption that Gautreaux neighborhood placements are uncorrelated with unobserved characteristics of households after conditioning on origin neighborhood and cohort fixed effects. While our assessment of balance in our sample provides no strong evidence suggesting violations of this identifying assumption, our household fixed effect approach relies on alternative identification conditions.

Katz, 2021).

Our strategy is informed by prior work documenting an age-based gradient in neighborhood effects, even within family (Chetty and Hendren, 2018; Chetty et al., 2018). Intuitively, we compare children within the same Gautreaux household and exploit the fact that younger children would have been exposed to a predominantly white neighborhood for a longer period of childhood than their older siblings, and hence should experience larger treatment effects under an exposure effects model.

The top panel of Table VII reports the results from estimating equation 2 which compares outcomes for children below age 10 at baseline to their older siblings.[33] The estimate in column (1) implies that the younger siblings earned about $4,600 more on average during ages 24-28 in treated households compared with their counterparts in control households. The estimates in columns (2) to (4) appear slightly larger at later ages of earnings, but we cannot statistically reject that the impacts are the same.

Based on an alternative approach, the bottom panel of Table VII reports results from linear exposure specification which replaces the indicator for being less than age 10 with a continuous measure of age.[34] Consistent with the results from the binary specification, the benefits of moving to predominantly white neighborhoods appear to erode with age at the time of move. The coefficients imply that the gains from treatment shrink by between $338 to $473 per year of reduced exposure, depending on when earnings are measured in adulthood. These estimates are broadly similar to those found in Chetty, Hendren, and Katz (2016). The fact that these estimates similarly point toward increases in earnings is reassuring and implies that our main specification of the effects of Gautreaux placements are unlikely to be driven by differences in unobservables across families placed in predominantly white and Black neighborhoods. Of course, this approach is unable to control for factors that vary over time within families. However, the fact that we find no evidence of meaningful changes to parental circumstances in Section 2 provides additional reassurance that our results are not confounded by time-varying unobservables within households.

Next, we address additional robustness concerns related to the sensitivity of our results to alternative sample constructions and specifications. Appendix Table XXI reports estimates of the impact of Gautreaux placements on earnings and neighborhood racial composition using a range of different sample restrictions and specifications. The first column reproduces the results for key outcomes based on equation 1 for comparison. Columns (2) to (5) show

[33]We provide additional results for the sample of Gautreaux children with siblings in the Online Appendix. First, we show that the the inclusion of baseline (pre-move) controls does not meaningfully affect the point estimates in Appendix Table XIX. Second, we report results from equation 1 restricted to the sibling sample used for our household fixed effect estimates in Appendix Table XX. The sibling sample results are similar to our main estimates in Table III.

[34]Specifically, we estimate:

$$Y = \lambda + \delta 1(ShareBlack_{d(i)} < 0.30) \times Age_i + \kappa Age_i + \mu_{h(i)} + X_i'\gamma + \epsilon_i',$$

where Age_i is the child's age at the time of registration, and $\mu_{h(i)}$ is a household fixed effect. This specification mirrors that of Chetty, Hendren, and Katz (2016), but the treatment main effect is absorbed by the household fixed effect.

results from models where we vary the sample by relying only on Gautreaux households that accepted their first housing offer, exclude households placed during the 1990s (a period during which the Leadership Council reduced the size of its real estate staff), include households placed before the 1981 consent decree, and focus only on households placed during years when Chicago's housing market had a relatively low vacancy rate, respectively. Column (6) provides results from an alternative specification where we define treatment as being placed in a suburban neighborhood (i.e., any Census tract outside of the city of Chicago). Owing to the potential underlying exogeneity in neighborhood placements through Gautreaux, we find consistently similar results regardless of sample restrictions or model specifications.

Finally, we conduct analysis to address the concern that some of our findings could be an artifact of multiple hypothesis testing. To address the concern over false positives, we have followed recommended practices to adjust per-comparison p-values to account for multiple outcomes (Anderson, 2008). To do this, we begin by choosing one measure from each of the sets of outcomes that we use as dependent variables in our analysis of the effects of desegregating moves. Specifically, we focus on the following 6 outcomes: (1) earnings at ages 24-28; (2) homeownership; (3) later-life neighborhood % Black; (4) marriage; (5) mortality; and (6) incarceration. Next, we use a two-step procedure from Benjamini, Krieger, and Yekutieli (2006) to calculate p-values that control for the false discovery rate (FDR), which is the proportion of rejections that are false positives (Type I errors). Appendix Table XXII reports the results and reassuringly shows that the main conclusions of our analysis do not change as the adjusted p-values for the main economic and social estimates that we consider are significant at conventional levels.

VI. COMPARING RESULTS FROM GAUTREAUX AND THE MTO HOUSING VOUCHER EXPERIMENT

In this section, we compare the effects of desegregating neighborhood placements through the Gautreaux program to the effects of voucher-based moves from the Moving to Opportunity (MTO) program. A landmark randomized controlled experiment conducted in partnership with HUD, MTO provided low-income, mostly minority families with subsidized housing vouchers that could be redeemed only in low-poverty neighborhoods. Unlike the Gautreaux setting, MTO had little impact on residential racial composition and saw treated families move to overwhelmingly minority neighborhoods (Kling, Liebman, and Katz, 2007). Our comparison allows us to explore whether a mobility program targeting neighborhood race has different impacts than a mobility program that targets poverty alone.[35]

For our comparisons, we rely on two types of sources for estimates of the impacts of MTO. First, we generate new estimates of impacts on later-life neighborhood choices by linking the

[35]One caveat for our interpretation is that prior studies of MTO produce estimates that reflect both effects of exposure to poverty and any disruption due to moving costs. This is by design as the MTO experimental design relies on comparisons of families that moved using experimental vouchers and a control group of families who did not move. In contrast, our analysis of Gautreaux produces estimates that are free from moving costs due to the fact that our designated treatment and control groups all moved to new neighborhoods.

MTO experimental sample to the Census MAF-ARF. Second, we rely on previously produced estimates of the effects of MTO on children's labor market outcomes from Chetty, Hendren, and Katz (2016). We compare impacts from MTO and Gautreaux by re-scaling estimates of each program's treatment-on-the-treated (TOT) effects by dividing by the relevant control group means.[36] The motivation for this adjustment is based on the fact that there are differences between the average outcomes in each study's control groups.

To illustrate the difference in the "first-stage" impacts of these housing mobility programs, we re-examine the impacts of each program on the initial post-treatment neighborhood characteristics. Figure IIa reports estimated first-stage impacts on three tract-level characteristics (re-scaled by the respective control group means): the upward mobility of children (i.e., predicted income rank) based on the Opportunity Atlas (Chetty et al., 2018), the poverty rate, and Black population share. The two left-most bars indicate that MTO (light blue) and Gautreaux (dark blue) had positive and roughly comparable impacts on predicted income ranks.[37] Next, the middle set of bars show that both MTO and Gautreaux treatments reduced poverty rates and the magnitudes are again quite similar. Finally, as noted earlier, the right-most set of bars show that programs diverge in their relative impacts on neighborhood racial composition. MTO moved treated families to neighborhoods with slightly lower Black population share, whereas Gautreaux—by design—placed families in neighborhoods that were drastically less Black. In sum, Figure IIa illustrates that the first-stage neighborhood impacts of MTO and Gautreaux differ primarily in their impacts on residential racial segregation.

Having established the differences in the first-stage impacts on neighborhood conditions, we now compare the labor market impacts of MTO and Gautreaux. As previewed above, we rely on published estimates from Chetty, Hendren, and Katz (2016). Appendix Figure VI reports relative effects on children's earnings measured for both MTO and Gautreaux. In all comparisons, we focus on all children below age 13, because of the heterogeneous impact of relocation for these children found in prior work Chetty, Hendren, and Katz (2016). To achieve greater comparability with the demographic composition of the Gautreaux sample, we also study estimates for the subsample of Black children in MTO.[38] Given that the

[36] In the case of MTO, it is important to focus on TOT estimates given that only half of the treatment group assigned vouchers restricted to low-poverty areas complied and moved through the program (Kling, Liebman, and Katz, 2007). The estimates produced from equation 1 based on the Gauteraux sample represent estimates of the TOT impact of the program.

[37] Although Figure IIa shows that the first-stage effects (relative to the control group means) on neighborhood income ranks are similar across programs, the absolute treatment effects on income ranks are larger in the Gautreaux sample (where there is an estimated 10.5 percentile increase) than in the MTO sample (where there is an estimated 7.5 percentile increase). The fact that the MTO control group lives in relatively more disadvantaged neighborhoods post-randomization (driven by the fact few control families move from their original baseline location) is what makes the relative effects more similar between the two programs.

[38] As another comparison of interest, we also report estimated effects of relocation due to public housing demolition from Chyn, Haggag, and Stuart (2022), a sample which was nearly entirely Black. As in our analysis of Gautreaux, these estimates are also based on a sample of children who moved from disadvantaged neighborhoods within Chicago.

previous MTO studies provide estimates of the effects on earnings measured at age 26, we produce additional estimates (which are consistent with our findings in Table III) for this specific age using the Gautreaux sample.

We find that desegregating moves through Gautreaux significantly increases earnings at age 26 by approximately 22 percent. The estimates are broadly comparable to the estimates of moving to low poverty for all the samples of MTO children which range from 13 to 30 percent. These estimates provide some suggestive evidence that mobility programs which target either residential racial segregation or neighborhood poverty have broadly similar impacts on labor market outcomes of children.

Next, we compare the effects of Gautreaux placements and MTO impacts on children's neighborhood choices later in life. Figure IIb compares the impacts on children's neighborhood choices in adulthood across program—i.e., the "second-stage" effects of each program on neighborhood outcomes as of 2019. Again, we focus on Black children younger than age 13 at the time of move in both the Gautreaux and MTO samples.

The first key finding from our analysis of later-life neighborhood choices is that MTO and Gautreaux have substantially different impacts on residential racial composition. This pattern is apparent in the right-most set of bars. Moving to low poverty areas in MTO has little impact on Black children's propensity to live around Black neighbors as adults. In contrast, moving to predominantly white neighborhoods in childhood through Gautreaux resulted in children choosing more racially-diverse later-life neighborhoods. As demonstrated in Appendix Table XXIII, the difference in effects is statistically significant at the one-percent level.[39] This contrast of the effects on the future choices of neighborhoods for children between the two programs closely mirrors the differences between each program's initial impacts on the neighborhood characteristics.

One potential interpretation of this finding is that exposure to predominantly white communities in childhood could shape later-life neighborhood preferences or the ability to navigate barriers in the housing market that minorities face when attempting to move to more racially diverse neighborhoods.[40] Figure IIb (in the middle set of bars) supports this interpretation and also demonstrates that MTO and Gautreaux had roughly similar impacts on reducing neighborhood poverty. This pattern suggests that the relatively larger effects of Gautreaux on racial diversity are not simply driven by the program having larger impacts on preferences for living in areas that have higher income.

Our second main finding is that the Gautreaux moves generated larger positive impacts on the predicted later-life income rank of neighborhoods chosen by children in adulthood. The left-most bars of Figure IIb show that MTO and Gautreaux generate relative effects sizes around 1 and 5 percent, respectively. Importantly, these differences in estimated treatment

[39]As an alternate comparison, Appendix Table XXIV reports effects on neighborhood locations measured at age 26. The patterns of results are unchanged. Estimated impacts on race and upward mobility are larger-in-magnitude for the Gautreaux sample.

[40]Bergman et al. (2024) provide experimental evidence that suggests high-cost barriers in the housing search process prevent low-income families who receive housing vouchers from moving to high opportunity areas.

effects on neighborhood choice imply that the the effects of Gautreaux on future generations could be larger than those in MTO.

In summary, we conclude with observations on how these comparisons of Gautreaux and MTO relate to our understanding of the independent impacts of neighborhood characteristics and the horse-race results from Section V.B. Across studies, the results support the idea that shifting the racial composition of neighborhoods has distinct impacts on social outcomes. The Gautreaux moves to predominantly white neighborhoods increased a child's propensity to live in more racially diverse areas later-in-life, while the MTO moves to low-poverty, high-minority neighborhoods did not. This pattern is consistent with the horse-race analysis, which also found that neighborhood race plays the more important role in driving later-life neighborhood choice. In the case of economic outcomes, the similarity of each program's reduced form impact on earnings suggests that neighborhood poverty may play a *greater* role in determining long-run economic mobility. While less definitive due to limited precision, the horse-race analysis of future earnings found a larger point estimate for poverty rates compared to the neighborhood race estimate. Collectively, we interpret these results as suggesting that economic desegregation likely mediates a substantial portion of the observed reduced form effects of racial desegregation.

VII. CONCLUSION

This paper provides the first comprehensive analysis of the long-run effects of Gautreaux, the largest residential racial desegregation program in U.S. history. For more than two decades, Gautreaux program administrators worked to move thousands of low-income Black families to predominantly white, low-poverty neighborhoods. The product of a Civil Rights-era lawsuit, Gautreaux inspired dozens of similar legal efforts to desegregate housing through the creation of new public housing and housing voucher policies.

The Gautreaux program's focus on racial desegregation provides a unique opportunity to understand how neighborhood racial composition shapes the long-run outcomes of children. Previous studies of housing mobility interventions have focused solely on the effects of moving minority children to low-poverty but still racially segregated areas (Chetty, Hendren, and Katz, 2016; Chyn, 2018). Yet, the importance of neighborhood race as a factor that may affect children has long been posited in discussions of neighborhood effects (Wilson, 2010; Clampet-Lundquist et al., 2011).

We link historical program records to a rich array of administrative and Census data to study the effects of Gautreaux moves on both economic and social measures. In terms of economic outcomes, our analysis yields two main findings. First, our reduced form analysis of desegregating moves suggests that the combined effects of moves to white and low-poverty neighborhoods on children's earnings and wealth are positive and large-in-magnitude. Second, a substantial portion of this overall effect on long-run economic outcomes of children appears to be due to the distinct impact of neighborhood economic desegregation.

For social outcomes, we find that experiencing desegregating moves during childhood

caused Gautreaux children to live in neighborhoods that are substantially more racially-diverse in adulthood. In contrast to the results for economic outcomes, the evidence suggests these effects are due primarily to the effects of Gautreaux placements on neighborhood racial composition and not the accompanying reductions in exposure to poverty. Our findings can be interpreted as being in line with predictions based on the contact hypothesis, which has been documented frequently in schooling contexts (Allport, 1954; Rao, 2019; Merlino, Steinhardt, and Wren-Lewis, 2019; Carrell, Hoekstra, and West, 2019; Mousa, 2020; Billings, Chyn, and Haggag, 2021).

What do our results imply for policy? Our findings for economic outcomes broadly suggest that housing mobility programs targeted to families with children can be an effective anti-poverty policy. This aligns with recent studies of other residential mobility programs that similarly show beneficial impacts on the economic mobility of low-income children (Chetty, Hendren, and Katz, 2016; Chyn, 2018). The effects of Gautreaux on social outcomes also have implications if policymakers seek to reduce racial segregation across neighborhoods for social or political grounds. The fact that childhood exposure to residential diversity has distinct impacts on later-life neighborhood choice suggests that mobility programs may need to look beyond a singular focus on encouraging moves to higher income neighborhoods.

UNIVERSITY OF TEXAS-AUSTIN AND NATIONAL BUREAU OF ECONOMIC RESEARCH
UNIVERSITY OF NOTRE DAME AND NATIONAL BUREAU OF ECONOMIC RESEARCH
U.S. CENSUS BUREAU

REFERENCES

Abowd, John J., John Haltiwanger, and Julia Lane, "Integrated Longitudinal Employer-Employee Data for the United States," *American Economic Review*, 94 (2004), 224–229.

Akerlof, George and Rachel Kranton, "Economics and Identity," *The Quarterly Journal of Economics*, 115 (2000), 715–753.

Aliprantis, Dionissi, Daniel Carrol, and Eric Young, "The Dynamics of the Racial Wealth Gap," *Federal Reserve Bank of Cleveland, Working Paper*, (2019).

Allport, Gordon W., *The Nature of Prejudice*, Pages: xviii, 537, Oxford, England: Addison-Wesley, 1954.

Anderson, Michael L, "Multiple Inference and Gender Differences in the Effects of Early Intervention: A Reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects," *Journal of the American Statistical Association*, 103 (2008), 1481–1495.

Anstreicher, Garrett, Jason Fletcher, and Owen Thompson, *The Long Run Impacts of Court-Ordered Desegregation*, Working Paper, 2022.

Austin, Richard B., *Gautreaux v. Chicago Housing Authority*, 1969.

Bacher-Hicks, Andrew, Stephen B. Billings, and David J. Deming, "The School to Prison Pipeline: Long-Run Impacts of School Suspensions on Adult Crime," *National Bureau of Economic Research*, (2019).

Barksy, Robert, John Bound, Kerwin Kofi Charles, and Joseph Lupton, "Accounting for the Black-White Wealth Gap: A Nonparametric Approach," *Journal of the American Statistical Association*, 97 (2002).

Barnhardt, Sharon, Erica Field, and Rohini Pande, "Moving to Opportunity or Isolation? Network Effects of a Randomized Housing Lottery in Urban India," *American Economic Journal: Applied Economics*, 9 (2017), 1–32.

Bayer, Patrick and Kerwin Kofi Charles, "Divergent Paths: A New Perspective on Earnings Differences Between Black and White Men Since 1940," *The Quarterly Journal of Economics*, 133 (2018), 1459–1501.

Bayer, Patrick, Stephen L. Ross, and Giorgio Topa, "Place of Work and Place of Residence: Informal Hiring Networks and Labor Market Outcomes," *Journal of Political Economy*, 116 (2008), 1150–1196.

Benjamini, Yoav, Abba M Krieger, and Daniel Yekutieli, "Adaptive Linear Step-up Procedures that Control the False Discovery Rate," *Biometrika*, 93 (2006), 491–507.

Bergman, Peter, "The Risks and Benefits of School Integration for Participating Students: Evidence from a Randomized Desegregation Program," *Institute of Labor Economics (IZA)*, (2018).

Bergman, Peter, Raj Chetty, Stefanie DeLuca, Nathaniel Hendren, Lawrence F Katz, and Christopher Palmer, "Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice," *American Economic Review*, 114 (2024), 1281–1337.

Bertrand, Marianne, Erzo F. P. Luttmer, and Sendhil Mullainathan, "Network Effects and Welfare Cultures," *The Quarterly Journal of Economics*, 115 (2000), 1019–1055.

Billings, Stephen B., Eric Chyn, and Kareem Haggag, "The Long-Run Effects of School Racial Diversity on Political Identity," *American Economic Review: Insights*, 3 (2021), 267–284.

Carrell, Scott E., Mark Hoekstra, and James E. West, "The Impact of College Diversity on Behavior toward Minorities," *American Economic Journal: Economic Policy*, 11 (2019), 159–182.

Case, Anne C. and Lawrence F. Katz, "The Company You keep: The Effects of Family and Neighborhood on Disadvantaged Youths," *National Bureau of Economic Research*, NBER Working Paper Series (1991).

Cattaneo, Matias D, Richard K Crump, Max H Farrell, and Yingjie Feng, "On binscatter," *American Economic Review*, 114 (2024), 1488–1514.

Charles, Kerwin Kofi and Eric Hurst, "The Transition to Home Ownership and the Black-white Wealth Gap," *Review of Economics and Statistics*, 84 (2002), 281–297.

Charles, Kerwin Kofi and Ming Ching Luoh, "Male Incarceration, the Marriage Market, and Female Outcomes," *Review of Economics and Statistics*, 92 (2010).

Chetty, Raj, John Friedman, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter, "The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility," NBER Working Paper (2018).

Chetty, Raj and Nathaniel Hendren, "The Effects of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects," *The Quarterly Journal of Economics*, 133 (2018), 1107–1162.

Chetty, Raj, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter, "Race and Economic Opportunity in the United States: an Intergenerational Perspective," *The Quarterly Journal of Economics*, 135 (2020), 711–783.

Chetty, Raj, Nathaniel Hendren, and Lawrence Katz, "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment," *American Economic Review*, 106 (2016), 855–902.

Chetty, Raj, Matthew O Jackson, Theresa Kuchler, Johannes Stroebel, Nathaniel Hendren, Robert B Fluegge, Sara Gong, Federico Gonzalez, Armelle Grondin, Matthew Jacob, et al., "Social Capital I: Measurement and Associations with Economic Mobility," *Nature*, 608 (2022), 108–121.

Chin, Mark J, "Desegregated but Still Separated? The Impact of School Integration on Student Suspensions and Special Education Classification," *Journal of Urban Economics*, 103389 (2021).

Chyn, Eric, "Moved to Opportunity: The Long-Run Effects of Public Housing Demolitions on Children," *American Economic Review*, 108 (2018).

Chyn, Eric, Kareem Haggag, and Bryan A. Stuart, *The Effects of Racial Segregation on Intergenerational Mobility: Evidence from Historical Railroad Placement*, Working Paper, National Bureau of Economic Research, 2022.

Chyn, Eric and Lawrence F. Katz, "Neighborhoods Matter: Assessing the Evidence for Place Effects," *Journal of Economic Perspectives*, 35 (2021), 197–222.

Clampet-Lundquist, Susan, Kathryn Edin, Jeffrey R. Kling, and Greg J. Duncan, "Moving Teenagers Out of High-Risk Neighborhoods: How Girls Fare Better than Boys," *American Journal of Sociology*, 116 (2011), 1154–1189.

Collins, Williams and Robert Margo, "Race and Home Ownership from the End of the Civil War to the Present," *American Economic Review*, 101 (2011), 355–59.

Collinson, Robert, Ingrid Gould Ellen, and Jens Ludwig, "Low-Income Housing Policy", *Economics of Means-Tested Transfer Programs in the United States, Volume 2*, University of Chicago Press, 2015, 59–126.

Crowley, John Powers, *Gautreaux v. Landrieu [Memorandum Opinion and Order]*, 1981.

DeLuca, Stefanie, "The Continuing Relevance of the Gautreaux Program for Housing Mobility: Recent Evidence," *Keeping the Promise: Preserving and Enahncing Housing Mobility in the Section*, 8 (2005), 25–42.

DeLuca, Stefanie, Greg J. Duncan, Micere Keels, and Ruby M. Mendenhall, "Gautreaux Mothers and Their Children: An Update," *Housing Policy Debate*, 20 (2010), 7–25.

Derenoncourt, Ellora, "Can You Move to Opportunity? Evidence from the Great Migration," *American Economic Review*, 112 (2022), 369–408.

Derenoncourt, Ellora, Chi Hyun Kim, Moritz Kuhn, and Moritz Schularick, "Wealth of Two Nations: The US Racial Wealth Gap, 1860–2020," *The Quarterly Journal of Economics*, 139 (2024), 693–750.

Finlay, Keith and Katie R. Genadek, "Measuring All-Cause Mortality with the Census Numident File," *American Journal of Public Health*, 111 (2021), S141–S148.

Fryer, Roland G, "Guess Who's Been Coming to Dinner? Trends in Interracial Marriage over the 20th Century," *Journal of Economic Perspectives*, 21 (2007), 71–90.

Goldman, Benjamin, Jamie Gracie, and Sonya R Porter, "Who Marries Whom? The Role of Segregation by Race and Class", 2024.

Guryan, Jonathan, "Desegregation and Black Dropout Rates," *The American Economic Review*, 94 (2004), 919–943.

Huckfeldt, R. Robert, "Social Contexts, Social Networks, and Urban Neighborhoods: Environmental Constraints on Friendship Choice," *American Journal of Sociology*, 89 (1983), 651–669.

Jackson, C. Kirabo, Rucker C. Johnson, and Claudia Persico, "The Effects of School Spending on Educational and Economic outcomes: Evidence from School Finance Reform," *The Quarterly Journal of Economics*, 131 (2016), 157–218.

Jankov, Pavlyn and Carol Caref, "Segregation and Inequality in Chicago Public Schools, Transformed and Intensified Under Corporate Education Reform," *Education Policy Analysis Archives*, 25 (2017), 56–56.

Jencks, Christopher, Susan E Mayer, et al., "The Social Consequences of Growing Up in a Poor Neighborhood," *Inner-city poverty in the United States*, 111 (1990), 186.

Johnson, Rucker C., "Long-run Impacts of School Desegregation & School Quality on Adult Attainments," *NBER Working Papers 16664, National Bureau of Economic Research, Inc.* (2011).

Keels, Micere, "Second-Generation Effects of Chicago's Gautreaux Residential Mobility Program on Children's Participation in Crime," *Journal of Research on Adolescence*, 18 (2008), 305–352.

Keels, Micere, Greg J. Duncan, Stefanie DeLuca, Ruby M. Mendenhall, and James E. Rosenbaum, "Fifteen Years Later: Can Residential Mobility Programs Provide a Long-Term Escape From Neighborhood Segregation, Crime, and Poverty," *Demography*, 42 (2005), 51–73.

Kling, Jeffrey R., Jeffrey B. Liebman, and Lawrence F. Katz, "Experimental Analysis of Neighborhood Effects," *Econometrica*, 75 (2007), 83–119.

Kuhn, Moritz, Moritz Schularick, and Ulrike I. Steins, "Income and Wealth Inequality in America, 19492016," *Journal of Political Economy*, 128 (2020), Publisher: The University of Chicago Press, 3469–3519.

Lautz, Jessica, Meredith Dunn, Brandi Snowden, Matthew Christopherson, and Sidnee Holmes, *2022 NAR Profile of Home Buyers and Sellers*, National Association of Realtors, 2022.

Logan, John, Brian Stults, and Rachel McKane, "Contributors to Concentrated Poverty of Blacks and Hispanics in Metropolitan America, 1980–2020," *Journal of Urban Affairs*, (2023), 1–21.

Logan, Trevon and John Parman, "Segregation and Homeownership in the Early Twentieth Century," *American Economic Review*, 107 (2017), 410–414.

Ludwig, Jens, Greg J Duncan, Lisa A Gennetian, Lawrence F Katz, Ronald C Kessler, Jeffrey R Kling, and Lisa Sanbonmatsu, "Neighborhood effects on the Long-term Well-being of Low-income Adults," *Science*, 337 (2012), 1505–1510.

Ludwig, Jens and Jeffrey R. Kling, "Is Crime Contagious?," *The Journal of Law and Economics*, 50 (2007), 491–518.

Massey, Douglas S, "American Apartheid: Segregation and the Making of the Underclass," *American Journal of Sociology*, 96 (1990), 329–357.

Mendenhall, Ruby M., Stefanie DeLuca, and Greg J. Duncan, "Neighborhood Resources, Racial Segregation and Economic Mobility: Results from the Gautreaux Program," *Social Science Research*, 35 (2006), 892–923.

Merlino, Luca Paolo, Max Friedrich Steinhardt, and Liam Wren-Lewis, "More than Just Friends? School Peers and Adult Interracial Relationships," *Journal of Labor Economics*, 37 (2019), Publisher: The University of Chicago Press, 663–713.

Mousa, Salma, "Building Social Cohesion Between Christians and Muslims Through Soccer in Post-ISIS Iraq," *Science*, 369 (2020), Publisher: American Association for the Advancement of Science Section: Report, 866–870.

Olsen, Edgar O, "Housing Programs for Low-income Households", *Means-tested transfer programs in the United States*, University of Chicago Press, 2003, 365–442.

Peroff, Kathleen A., Cloteal L. Davis, Ronald Jones, Richard T. Curtin, and Robert W. Marans, *Gautreaux Housing Deconcentration: An Evaluation of its Impact on Participating Households*, Washington, DC: Department of Housing and Urban Development, Office of Policy Development & Research, Division of Policy Studies, 1979.

Polikoff, Alexander, *Waiting for Gautreaux: A Story of Segregation, Housing, and the Black Ghetto*, Evanston, IL: Northwestern University Press, 2007.

Popkin, Susan J., James E. Rosenbaum, and Patricia M. Meaden, "Labor Market Experinces of Low-Income Black Women in Middle-Class Suburbs: Evidence from a Survey of Gautreaux Program Participants," *Journal of Policy Analysis and Management*, 12 (1993), 556–5573.

Rao, Gautam, "Familiarity Does Not Breed Contempt: Generosity, Discrimination, and Diversity in Delhi Schools," *American Economic Review*, 109 (2019), 774–809.

Rickford, John R., Greg J. Duncan, Lisa A. Gennetian, Ray Yun Gou, Rebecca Greene, Lawrence F. Katz, Ronald C. Kessler, Jeffrey R. Kling, Lisa Sanbonmatsu, Andres E. Sanchez-Ordoñez, Matthew Sciandra, Ewart Thomas, and Jens Ludwig, "Neighborhood Effects on Use of African-American Vernacular English," *PNAS*, 112 (2015), 11817–11822.

Rosenbaum, James E., "Black Pioneers - Do Their Moves to the Suburbs Increase Economic Opportunity for Mothers and Children?," *Housing Policy Debate*, 2 (1991), 1179–1213.

Rosenbaum, James E., "Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program," *Housing Policy Debate*, 6 (1995).

Rosenbaum, James E., Susan J. Popkin, Julie E. Kaufman, and Jennifer Rusin, "Social Integration of Low-Income Black Adults in Middle-Class White Suburbs," *Social Problems*, 38 (1991), 448–461.

Rubinowitz, Leonard S. and James E. Rosenbaum, *Crossing the Class and Color Lines: From Public Housing to White Suburbia*, Chicago, IL: University of Chicago Press, 2000.

Sampson, Robert J, "Moving to Inequality: Neighborhood Effects and Experiments Meet Social Structure," *American Journal of Sociology*, 114 (2008), 189–231.

Setren, Elizabeth, *Busing to Opportunity? The Impacts of the METCO Voluntary School Desegregation Program on Urban Students of Color*, Working Paper, 2024.

Vilhuber, Lars, *LEHD Infrastructure S2014 files in the FSRDC*, tech. rep., Center for Economic Studies, U.S. Census Bureau, 2018, 18–27.

Votruba, Mark E. and Jeffrey R. Kling, "Effects of Neighborhood Characteristics on the Mortality of Black Male Youth: Evidence From Gautreaux," *Social Science & Medicine*, 68 (2009), 814–823.

Wagner, Deborah and Mary Lane, *The Person Identification Validation System (PVS): Applying the Center for Administrative Records Research and Applications' (CARRA) Record Linkage Software*, tech. rep., Center for Economic Studies, U.S. Census Bureau, 2014.

Wilson, William J., *The Truly Disadvantaged: the Inner City, the Underclass and Public Policy*, Chicago, IL: University of Chicago Press, 1987.

Wilson, William Julius, "Why Both Social Structure and Culture Matter in a Holistic Analysis of Inner-City Poverty," *The Annals of the American Academy of Political and Social Science*, 629 (2010), Publisher: [Sage Publications, Inc., American Academy of Political and Social Science], 200–219.

Table I
Summary Statistics and Balance Analysis

	(1)	(2)	(3)	(4)
	2000 Census Sample (Endogenous Movers)		Gautreaux Sample	
	Control Mean	Est.	Control Mean	Est.
Panel A. Household Heads:				
Female	0.875	-0.064***	0.937	0.017
	(0.331)	(0.021)	(0.244)	(0.016)
Age	28.530	-0.814***	29.830	-0.509
	(6.924)	(0.301)	(8.031)	(0.467)
Has Car	0.489	0.029	0.218	0.008
	(0.500)	(0.028)	(0.413)	(0.025)
Married	0.193	0.044*	0.227	0.033
	(0.394)	(0.023)	(0.419)	(0.029)
Working	0.549	0.036	0.240	-0.032
	(0.498)	(0.028)	(0.427)	(0.026)
Earnings	11,160	1,448**	6,266	-733
	(11,070)	(622)	(12,280)	(736)
Annual Income	12,940	1,494**	8,621	-19
	(10,490)	(583)	(5,669)	(369)
# Bedrooms Needed	2.192	-0.063	2.782	-0.045
	(1.041)	(0.058)	(0.697)	(0.049)
Public Housing			0.312	0.024
			(0.463)	(0.023)
Has License			0.404	0.008
			(0.491)	(0.030)
Panel B. Children				
Female			0.532	-0.017
			(0.499)	(0.022)
Age			7.280	-0.121
			(4.546)	(0.236)
Born in Chicago			0.933	-0.012
			(0.250)	(0.014)
Predicted Later-life Earnings			9,080	32
			(2,077)	(113)
Predicted Later-life Share Black			0.509	-0.003
			(0.049)	(0.003)
Sample Size		2,800		4,800
p-value (Joint Orthogonality)		0.001		0.535

Notes: This table reports results from assessing covariate balance in two samples. The treatment of interest is a binary indicator for moving to a predominantly white area (i.e., a Census tract with less than 30% Black population share). As a benchmark, the first two columns analyze a randomly selected sample of low-income Black household heads in the 2000 Census from Chicago who subsequently moved during the 2000-2005 period to either a predominantly white area or a neighborhood where the Black population share was at least 30%. Column 1 reports the average pre-move characteristics for the designated control group within this sample—heads who moved to higher-share Black neighborhoods. Column 2 reports an estimate of the difference in a given pre-move characteristic between those who did and did not move to predominantly white neighborhoods using a specification that controls for an origin neighborhood fixed effect. The next two columns analyze the sample of children from Gautreaux families who entered the program after 1981. The unit of analysis in the Gautreaux sample is a child, and we report statistics for their respective household head in the top panel. Column 3 reports the average pre-move characteristic for the designated control group in this sample—individuals who were placed in revitalizing Black neighborhoods. Column 4 reports an estimate of the difference in a given characteristic between those who were placed in predominantly white neighborhoods and those who were placed in revitalizing Black neighborhoods using a specification that controls for origin neighborhood and program registration year fixed effects. This estimated difference is based on equation 1, where the dependent variable is defined as a baseline (pre-move) characteristic measured in Gautreaux program records. For further details, see Section IV. Columns (1) and (3) report standard deviations in parentheses. Columns (2) and (4) report standard errors in parentheses. Standard errors are clustered at the household level. All results were approved for release by the U.S. Census Bureau, authorization numbers CBDRB-FY22-CES018-018 and CBDRB-FY24-0184. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table II
Effects of Desegregating Moves on Location Characteristics

	(1)	(2)	(3)	(4)
	Placement Tract Characteristic			
	Share Black	Share White	Poverty Rate	Later-life Income Rank
$1(ShareBlack_{d(i)} < 0.30)$	-0.807***	0.721***	-0.209***	0.107***
	(0.010)	(0.009)	(0.006)	(0.002)
Control Mean	0.874	0.101	0.323	0.301
Sample Size	3,563	3,563	3,563	3,563

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on a range of continuous neighborhood characteristics at the time of placement. The sample consists of eligible Gautreaux household heads who entered the program after 1981. All estimates are based on equation 1. Individual controls in the model are listed in Column 3 of Table I. Placement information comes from the Gautreaux records described in Section III. Columns 1-3 report estimated effects on the following tract-level 1980 Census characteristics: the Black population share, the white population share, and the poverty rate. Column 4 reports estimated effects on the tract-level later-life income rank of children using data from the Opportunity Atlas (Chetty et al., 2018). This table does not rely on restricted-access census data so the sample sizes are not rounded. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table III
Effects of Desegregating Moves on Economic Outcomes

	(1)	(2)	(3)
	Outcome: Earnings at...		
	Ages 24-28	Ages 29-33	Ages 34-38
1($ShareBlack_{d(i)} < 0.30$)	2,341***	2,457***	2,425**
	(626)	(855)	(1,126)
Control Mean	11,570	15,230	17,600
Sample Size	4,800	4,500	3,500
	Outcome: Cumulative Earnings by...		
	Age 28	Age 33	Age 38
1($ShareBlack_{d(i)} < 0.30$)	16,910***	24,980***	34,090**
	(4,470)	(8,320)	(14,760)
Control Mean	77,600	133,500	190,500
Sample Size	4,600	3,700	2,400
	Outcome: Homeownership		
	Owner	Ever Owner-Occupied	Share of Years Owner-Occupied
1($ShareBlack_{d(i)} < 0.30$)	0.099**	0.066**	0.073**
	(0.049)	(0.032)	(0.030)
Control Mean	0.247	0.429	0.365
Sample Size	700	2,000	2,000

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the long-run economic outcomes of Gautreaux children. All estimates are based on equation 1. Individual controls in the model are listed in Column 3 of Table I. The top panel reports results for average earnings at various age ranges indicated. The middle panel reports results for cumulative earnings up through the age indicated. All earnings measures are based on the LEHD data described in Section III. The dollar amounts are given in U.S. $2018. The bottom panel reports results for measures of homeownership based on the 2010 Census and MAF-ARF records. Detailed definitions of all outcomes are provided in Section III. The sample for all outcomes consists of children from Gautreaux families who entered the program after 1981. The sample for cumulative earning measures is limited to children age 24 or younger in 1990. This restriction ensures that we can observe their full earnings history for the cumulative earnings measure. The sample for homeownership is limited to individuals who were at least 35 years old at the time an outcome was measured. All results were approved for release by the U.S. Census Bureau, authorization numbers CBDRB-FY22-CES018-018 and CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table IV
Effects of Desegregating Moves on Social Outcomes

	(1)	(2)	(3)	(4)	(5)	(6)
	Outcome: Later-life Neighborhood Characteristics				Outcome: Marriage	
	Share Black	Share White	Poverty Rate	Later-life Income Rank	Married	Married White Spouse
1($ShareBlack_{d(i)} < 0.30$)	-0.098***	0.066***	-0.025***	0.020***	0.069**	0.021**
	(0.020)	(0.016)	(0.006)	(0.004)	(0.028)	(0.010)
Control Mean	0.452	0.318	0.202	0.374	0.288	0.017
Sample Size	4,200	4,200	4,200	4,200	2,000	2,000

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on long-run social outcomes of Gautreaux children. All estimates are based on equation 1. Individual controls in the model are listed in Column 3 of Table I. Columns 1-4 report results for later-life neighborhood (tract) characteristics. The neighborhood location is measured in 2019 using the MAF-ARF. For each neighborhood location, the racial composition and poverty rates come from the ACS 2015-2019 estimates. The later-life income rank is a tract-level mobility measure for children whose parents were at the 25th percentile of the income distribution from the Opportunity Atlas (Chetty et al., 2018). Columns 5 and 6 report results for marriage-related outcomes from the 2010 Census. Detailed definitions for all outcomes are provided in Section III. The sample for all outcomes consists of children from Gautreaux families who entered the program after 1981. The sample for marriage related outcomes is limited to those who responded to the 2010 Census and were listed as a household head or spouse. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table V
The Effects of Neighborhood Race Versus Poverty

	(1)	(2)	(3)
	Outcome: Earnings at Ages 24-28		
Share White (z-score)	591***		351*
	(138)		(213)
Poverty Rate (z-score)		-953***	-517
		(233)	(358)
Sample Size	4,800	4,800	4,800
	Outcome: Later-life Neighborhood Share Black		
Share White (z-score)	-0.025***		-0.018***
	(0.004)		(0.007)
Poverty Rate (z-score)		0.038***	0.014
		(0.007)	(0.011)
Sample Size	4,200	4,200	4,200

Notes: This table reports results from a horse-race analysis of the effects of the placement neighborhood share white and poverty rate on long-run outcomes of Gautreaux children. The independent variables of interest are standardized measures of each of the placement neighborhood characteristics. Column 1 reports results from a model where the only independent variable is the standardized share white of residents. Columns 2 similarly reports results from a model where the only independent variable is the standardized poverty rate. Column 3 reports estimates from equation 3, which includes both the standardized share white and the standardized poverty rate. The top and bottom panels present separate results where the dependent variables are earnings measured at ages 24-28 and later-life neighborhood share black measured in 2019, respectively. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table VI
Effects of Desegregating Moves on Parents/Head of Household Outcomes

	(1)	(2)	(3)
	Outcome: Earnings at...		
	Ages 38-42	Ages 43-47	Ages 48-52
1($ShareBlack_{d(i)} < 0.30$)	1,531	668	300
	(1,064)	(1,149)	(1,308)
Control Mean	15,820	16,180	15,580
Sample Size	2,500	2,500	2,100
	Outcome: Marriage and Homeownership		
	Married	Married White Spouse	Owner
1($ShareBlack_{d(i)} < 0.30$)	0.019	-0.010	-0.018
	(0.026)	(0.010)	(0.031)
Control Mean	0.178	0.013	0.269
Sample Size	2,000	1,400	2,100
	Outcome: Long-run Neighborhood Characteristics		
	Share Black	Share White	Poverty Rate
1($ShareBlack_{d(i)} < 0.30$)	-0.141***	0.081***	-0.032***
	(0.025)	(0.019)	(0.009)
Control Mean	0.512	0.279	0.201
Sample Size	2,100	2,100	2,100

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the outcomes of Gautreaux parents/head of households. All estimates are based on equation 1. Individual controls in the model are the household head characteristics listed in Column 3 of Table I in addition to birth year and place of birth fixed effects. The top panel reports impacts on earnings at various ages. All dollar amounts are U.S. $2018. The middle panel reports impacts on marriage, marriage to a white spouse, and homeownership using data from the 2010 Decennial Census. The bottom panel reports impacts on the characteristics of the household heads/parents' post-placement neighborhood. The neighborhood location is measured in 2019 for individuals who can be linked to the MAF-ARF records. For each neighborhood location, the racial composition and poverty rates come from the ACS 2015-2019 estimates. The sample for all outcomes consists of parents/household heads in Gautreaux families who entered the program after 1981. The sample for homeownership and marriage related outcomes is limited to those who responded to the 2010 Census. The sample for marriage related outcomes is limited to those who responded and were listed as a household head or a spouse. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

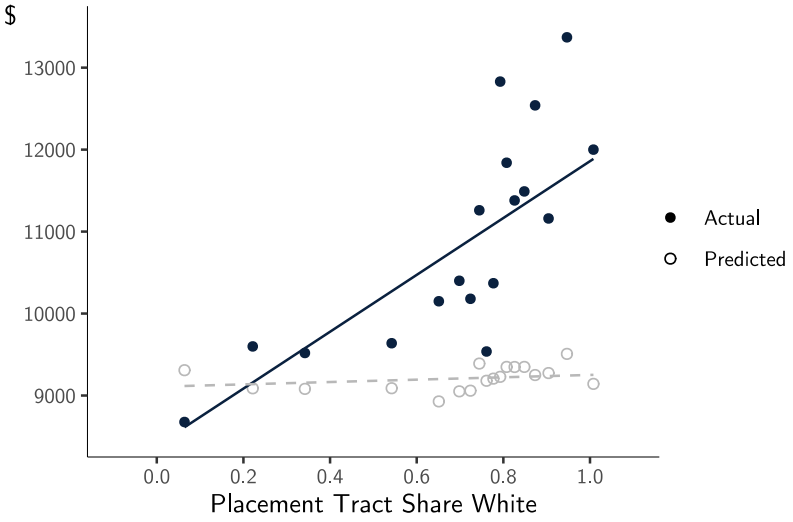
Table VII
Exposure Effects of Desegregating Moves on Earnings (Household Fixed Effects Estimates)

	(1)	(2)	(3)	(4)
	Outcome: Earnings at...			
	Ages 24-28	Ages 26-28	Ages 29-33	Cumulative by Age 28
Panel A. Binary Exposure				
$1(ShareBlack_{d(i)} < 0.30) \times 1(Age_i < 10)$	4,659***	5,770***	6,049**	26,490**
	(1,802)	(1,968)	(2,474)	(12,990)
Panel B. Linear Exposure				
$1(ShareBlack_{d(i)} < 0.30) \times Age_i$	-338*	-442**	-473*	-2,532
	(203)	(224)	(276)	(1,557)
Control Mean	11,570	12,690	15,230	77,600
Sample Size	3,800	3,800	3,500	3,600

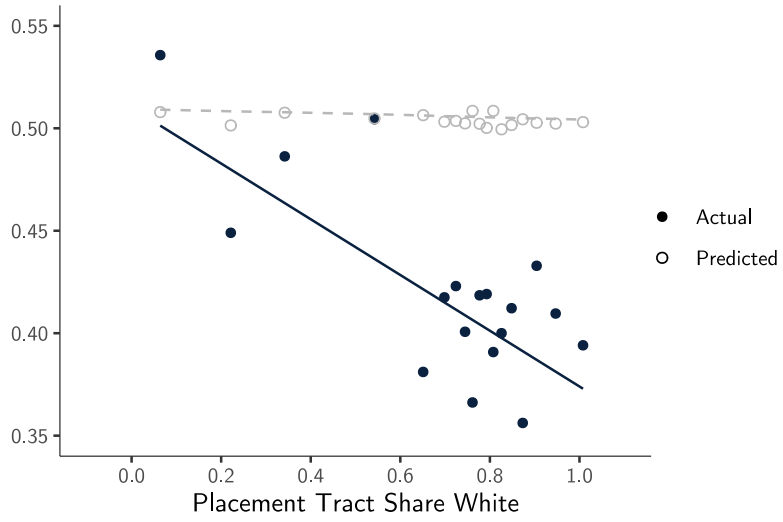
Notes: This table reports estimates from exposure models of the effects of placement in a predominantly white neighborhood (a Census tract with less than 30% Black population share) on the earnings of Gautreaux children. All results are based on models that include household fixed effects and individual controls for place of birth, birth year, and gender. The top panel reports the results from equation 2. The bottom panel replaces the indicators $1(Age_i < 10)$ in equation 2 with a continuous measure of age at registration. Columns 1-3 report results based on earnings outcomes measured at several different ages throughout adulthood. All earnings measures are based on the LEHD data described in Section III. The dollar amounts are U.S. $2018. The sample consists of children in Gautreaux families who entered the program after 1981. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Figure I
Long-Run Effects of Gautreaux Placement Neighborhood Racial Composition

(a) Annual Earnings in Adulthood (Age 24)



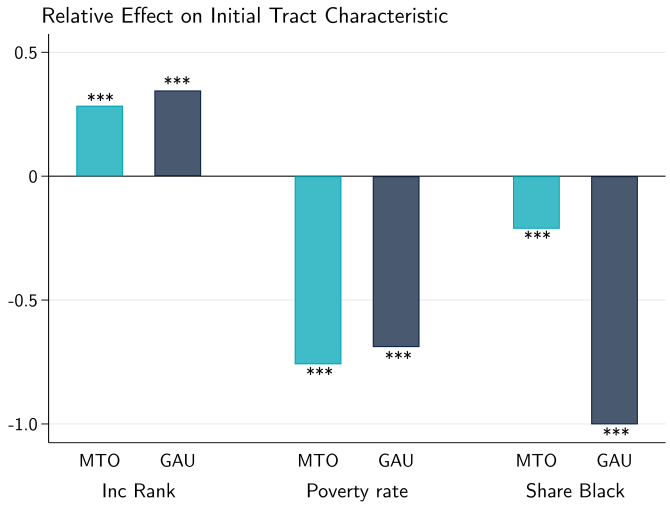
(b) Later-life Neighborhood Share Black



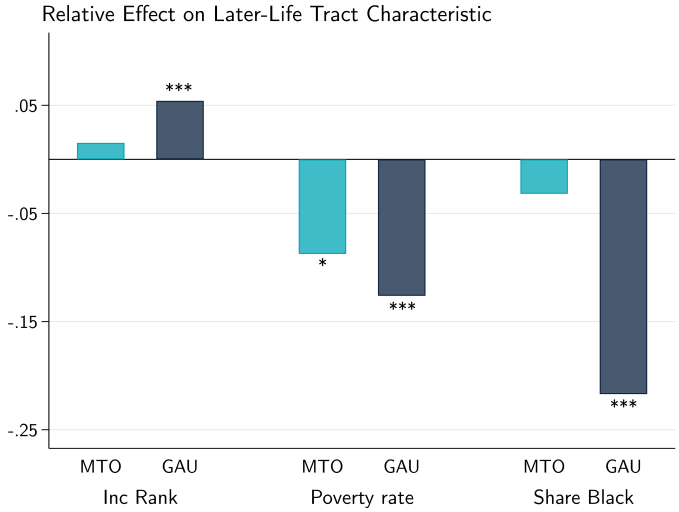
Notes: This figure illustrates a binned scatterplot (solid dots) of long-run child outcomes against a measure of the tract-level white population share in an individual's Gautreaux placement neighborhood. Panels (a) and (b) provide results where the outcome (y-axis) is earnings measured at ages 24 and later-life neighborhood Black population share, respectively. Each figure is constructed as follows. We compute residuals for both earnings and placement neighborhood white share after accounting for cohort and origin neighborhood fixed effects. Next, we divide the residuals of the placement neighborhood white share into 18 equal-sized bins, add the overall means of each measure to aid interpretation, and plot the resulting binned average of earnings and later-life neighborhood share Black. In addition, the figure reports (in hollow dots) estimates of predicted earnings in the top panel and predicted later-life neighborhood share Black in the bottom panel. We construct these fitted values by predicting each outcome using the individual and household characteristics in Table I measured at baseline. As in our approach with the observed outcomes, we generate these predictions using the residuals of each outcome that only remove origin and cohort fixed effects and add the mean of each outcome to aid interpretation. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018.

Figure II
Comparing the Effects of the MTO and Gautreaux Programs

(a) Impacts of Each Program on Initial Neighborhood



(b) Impacts on Later-life Neighborhood Choice



Notes: The top panel illustrates estimates of the impact of the MTO and Gautreaux programs on the initial neighborhood characteristics of treated families after they relocate. The bottom panel reports impacts of moving through MTO and Gautreaux on the later-life neighborhood characteristics of children when they are observed in adulthood. For MTO, the sample consists of Black children who were less than 13 at the time of random assignment. Later-life neighborhood characteristics are observed based on MAF-ARF records. For both the initial and later-life neighborhoods, we study the following tract-level characteristics: the "Inc. Rank" is the later-life average income rank for children from Chetty et al. (2018) (left-most bars); the "Poverty rate" is the fraction of residents below the federal poverty line (middle bars); the "Share Black" is the Black population share (right-most bars). Each bar reports an estimate of the relative effect from each program, which is defined as the estimated treatment-on-the-treated (TOT) effect divided by the respective control group mean. All results were approved for release by the U.S. Census Bureau, authorization numbers CBDRB-FY22-CES018-018 and CBDRB-FY24-0184. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

ONLINE APPENDIX
The Long-Run Effects of America's Largest Residential Racial Desegregation Program: Gautreaux

Eric Chyn, Robert Collinson, and Danielle Sandler

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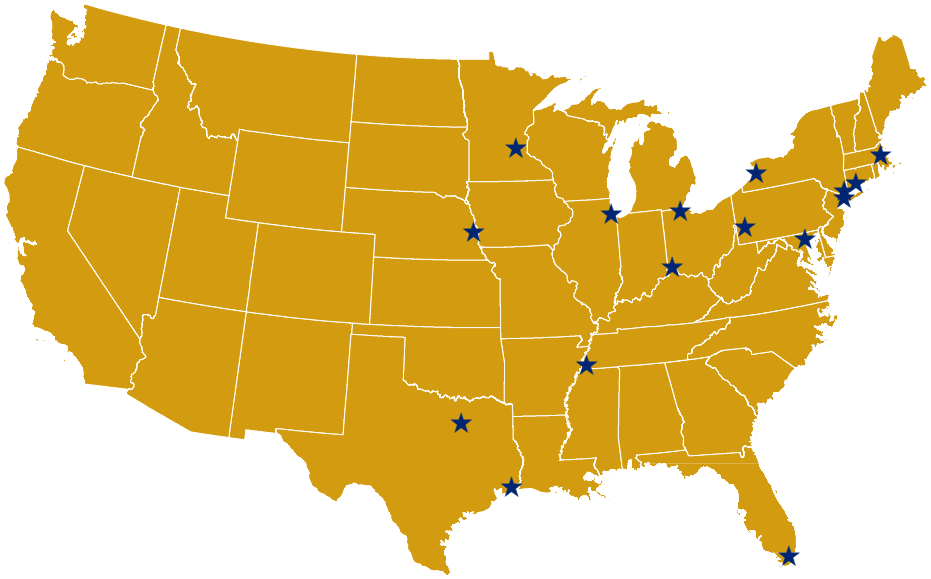
B.1 Details on the Census Match 78

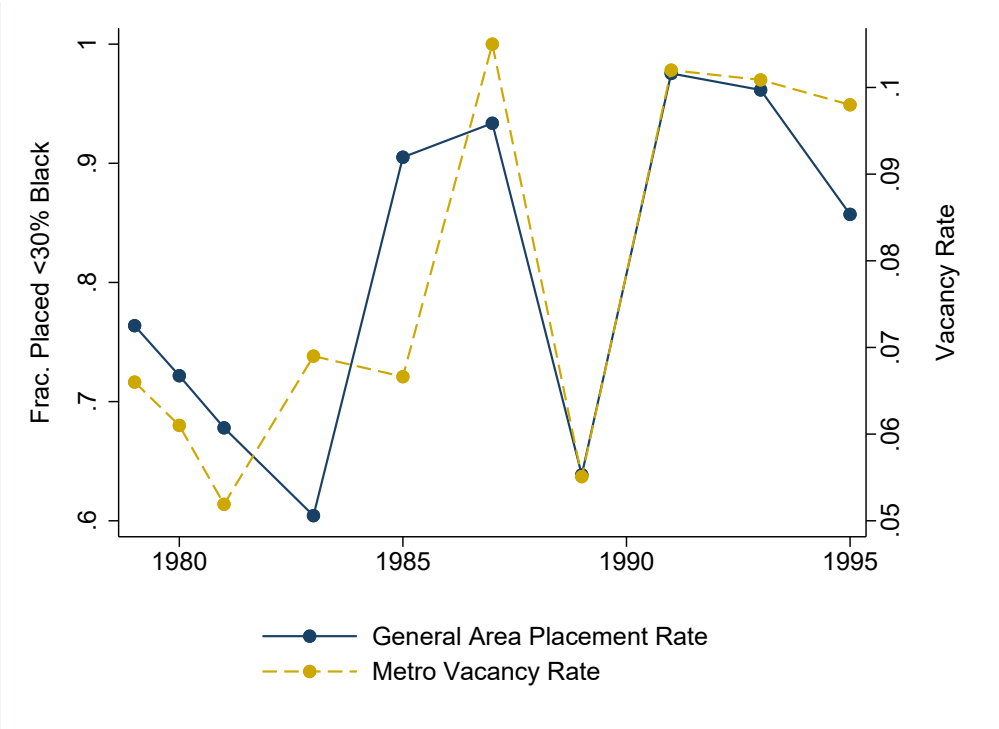
A. APPENDIX FIGURES AND TABLES

Appendix Figure I
Locations of Major Residential Racial Desegregation Lawsuits (1960s–1990s)



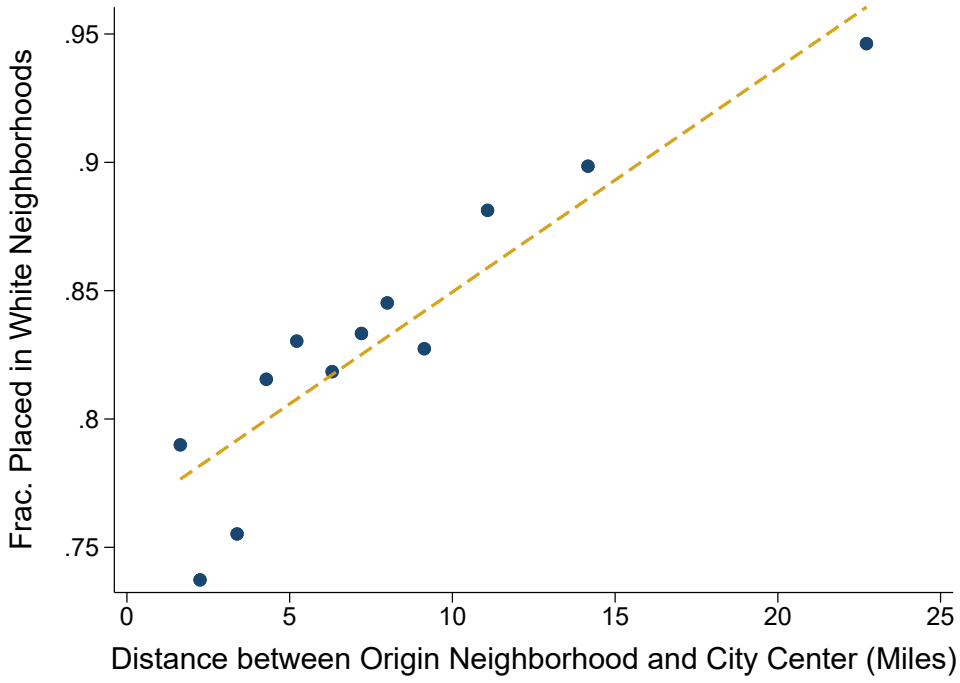
Notes: This map displays the locations of major desegregation lawsuits targeting HUD programs. The data source is Roisman (2000).

Appendix Figure II
Placement in Predominantly White (Less Than 30% Black) Neighborhoods and Chicago Vacancy Rates Over Time



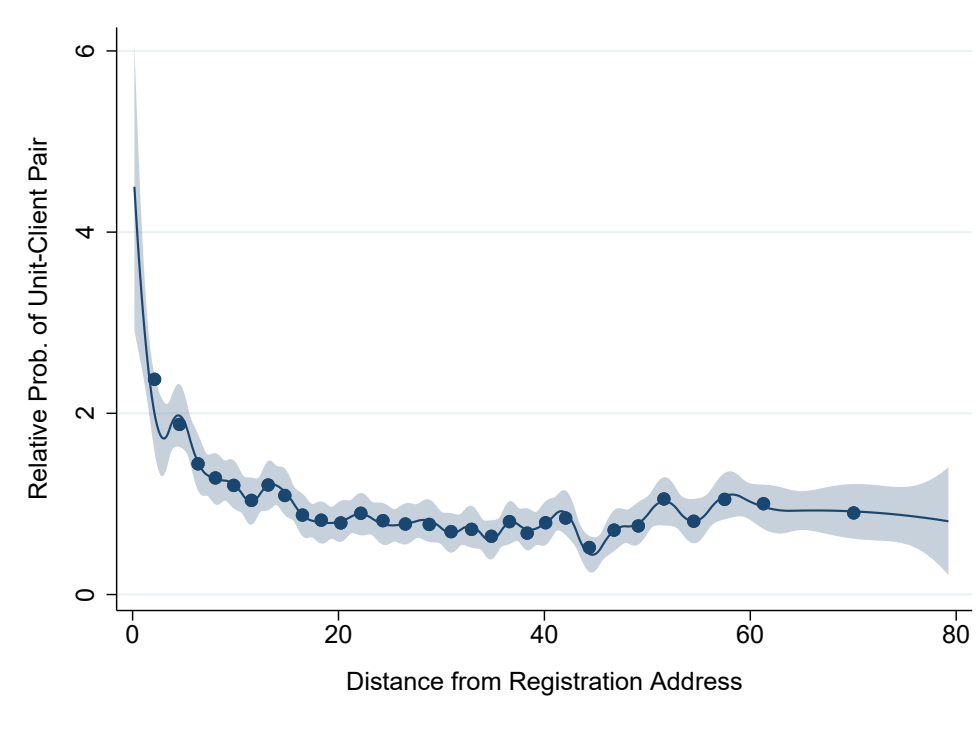
Notes: This figure plots the annual fraction of Gautreaux participants placed in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) (in blue) and the estimated rental vacancy rate in the Chicago metro area (in gold). The estimated annual vacancy rates come from the American Housing Survey (except in 1980 and 1990, which come from the 1980 and 1990 Decennial Census, respectively).

Appendix Figure III
Relationship Between Placement in Predominantly White Neighborhoods and Origin Neighborhood Distance to the City Center



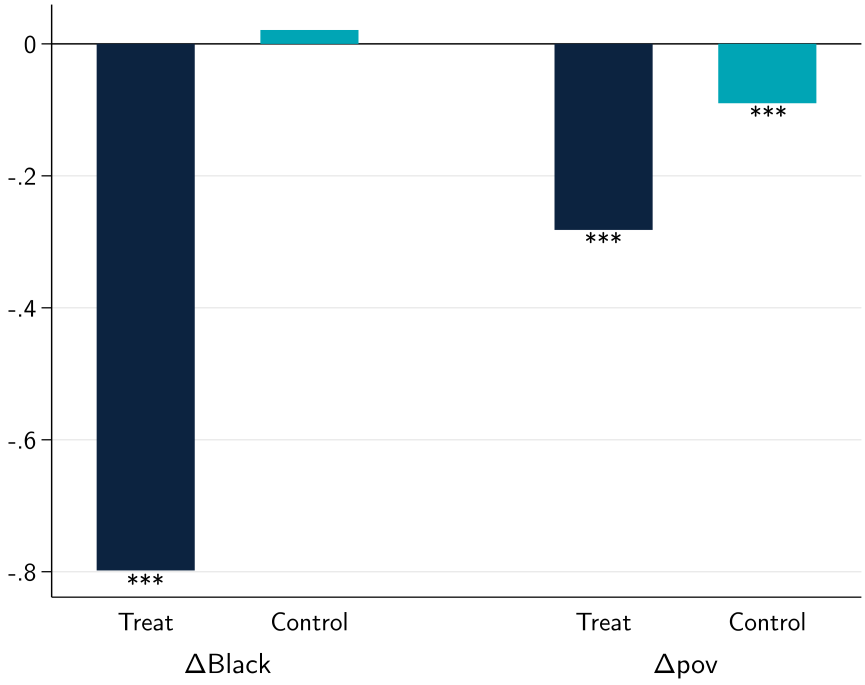
Notes: This figure illustrates a binned scatterplot of the average rate of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) against the distance (in miles) between a Gautreaux family's registration address (i.e., origin neighborhood) and the center of the city of Chicago. Information on placement and the address at registration come from Gautreaux program records.

Appendix Figure IV
Probability of Apartment-Family Placement Match by Distance Between Apartment and Origin Neighborhood



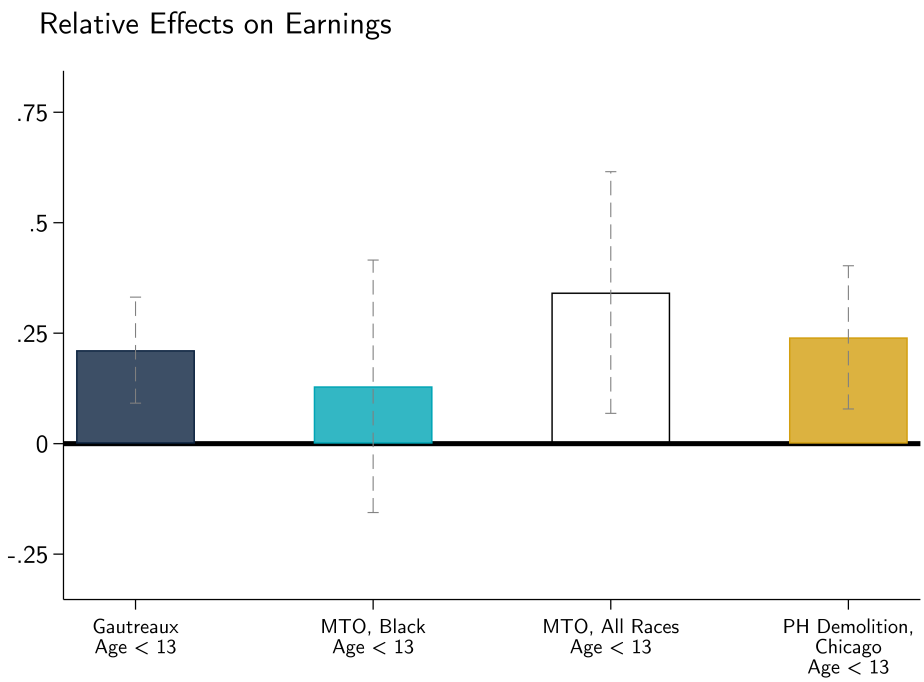
Notes: This figure illustrates a binned scatterplot of the likelihood that an apartment-family pair is matched through the Gautreaux program against the distance between a given apartment and the family's origin neighborhood. The sample of apartments considered is a list of all apartments available to Gautreaux families in the year that a particular family registered. We create data on all pairwise combinations of these apartments and the set of Gautreaux families who registered in the same year. In this data, we create an indicator which takes a value equal to one if the family was actually placed in a given apartment and calculate the distance between a given apartment and the family's registration address (i.e., origin neighborhood). We calculate the average match rate within bins of the apartment-family distance variable and estimate fitted lines and confidence bands using the approach developed in Cattaneo et al. (2024).

Appendix Figure V
Before-After Estimates of the Effects of Relocating through the Gautreaux Program



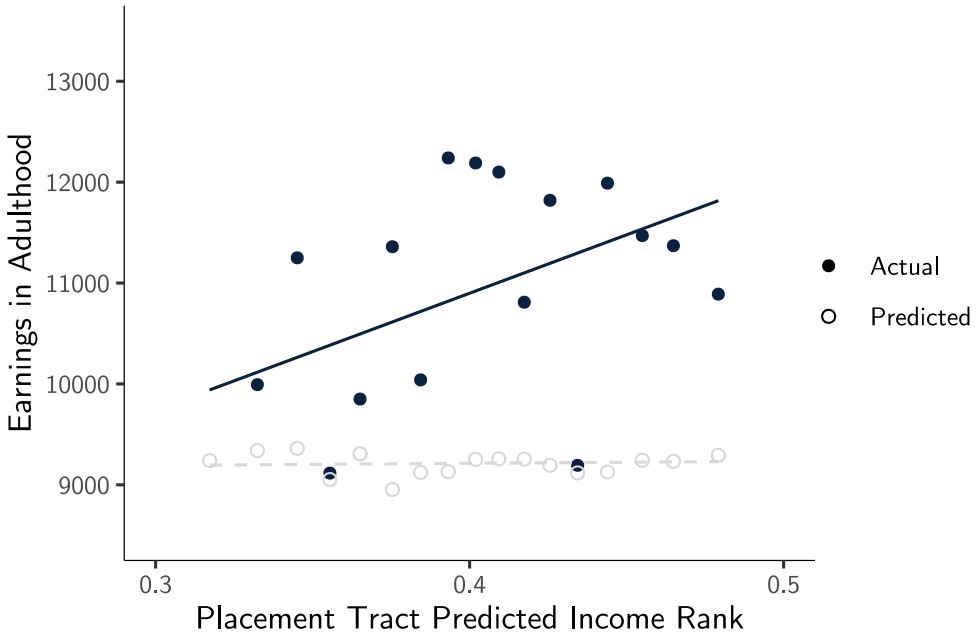
Notes: This figure reports results based on comparing the original (pre-move) and placement neighborhoods for two groups of Gautreaux families: the treatment group of families who were placed in predominantly white neighborhoods (i.e., a Census tract with less than 30% Black population share) and the control group of families who were placed in revitalizing Black neighborhoods. The left-most bars report the change in Black population share before and after relocation, while the right-most bars report changes in the poverty rate. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Figure VI
Comparing Estimated Impacts on Earnings Across Studies



Notes: This figure reports estimates of the effects of moving across the following contexts: the Gautreaux program, the MTO experimental housing voucher demonstration, and the public housing demolitions in Chicago. All results are for earnings in adulthood (measured at age 26) for children. In each case, the relevant sample is restricted to children less than age 13 at the time of move. The left-most bar reports estimates for the Gautreaux sample. The second bar reports results for the subsample of Black children in MTO. The third bar reports results for the MTO children of all races. All estimates for earnings for the MTO demonstration are from Chetty, Hendren, and Katz (2016). The right-most bar reports results for children whose family relocated due to public housing demolitions in Chicago from Chyn (2018). Each bar plots an estimate of the relative effect from each program, which is defined as the estimated treatment-on-the-treated (TOT) effect divided by the respective control group mean. The Gautreaux results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Figure VII
Effects of Desegregating Moves on Income Rank from the Opportunity Atlas on Earnings in Adulthood



Notes: This figure illustrates a binned scatterplot of long-run child outcomes (solid dots) against a measure of the tract-level later-life average income rank for low-income children associated with an individual's Gautreaux placement neighborhood. This neighborhood later-life income rank measure is from (Chetty et al., 2018). The figure is constructed as follows. We compute residuals for both later-life earnings and placement neighborhood later-life average income rank after accounting for cohort and origin neighborhood fixed effects. Next, we divide the residuals of the placement neighborhood income rank into 18 equal-sized bins, add the overall means of each measure to aid interpretation, and plot the resulting binned averages. In addition, the figure reports estimates of predicted earnings (hollow dots) based on pre-placement individual and household characteristics observed at the time a family registered for the Gautreaux program. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184.

Appendix Table I
Additional Balance Results Using Predicted Outcomes

	(1)	(2)
	Baseline Outcomes:	
	Predicted Earnings in Adulthood	*Predicted* Tract Share Black (2019)
Share White (z-score)	26.040	-0.001
	(23.690)	(0.001)
Control Mean	9,080	0.509
Sample Size	4,800	4,800
Share Black (z-score)	-14.720	0.001
	(27.940)	(0.001)
Control Mean	9,080	0.509
Sample Size	4,800	4,800
Poverty Rate (z-score)	-63.840	0.000
	(40.860)	(0.001)
Control Mean	9,080	0.509
Sample Size	4,800	4,800

Notes: This table reports results from a model that assesses balance using predicted outcome measures as the dependent variable and a placement neighborhood characteristic as the independent variable of interest. Columns 1 and 2 reports results where the predicted measures are earnings at age 24 and later-life neighborhood share black (measured in 2019), respectively. Each predicted measure is based on a model that is estimated using control group children (i.e., those placed in a revitalizing neighborhood) and predicting the given later-life outcomes using the baseline characteristics listed in Table I. The results from this model are used to create predicted values for our main sample of children. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table II
Placement Neighborhood Characteristic Correlations

	(1)	(2)	(3)	(4)	(5)
	Placement Tract Characteristic:				
	Share White	Poverty Rate	Median Income	College Degree Rate	Unemp. Rate
Share White	1.000				
Poverty Rate	-0.842	1.000			
Median Income	0.724	-0.837	1.000		
College Degree Rate	0.356	-0.463	0.478	1.000	
Unemployment Rate	-0.826	0.874	-0.746	-0.604	1.000
Sample Size	3,563	3,563	3,563	3,563	3,563

Notes: This table reports the correlation matrix for placement neighborhood characteristics using the sample of Gautreaux households. All neighborhood characteristics are tract-level measures from the 1980 Decennial Census.

Appendix Table III
Effects of Desegregating Moves on Local School Characteristics

	(1)	(2)	(3)	(4)
	Placement Neighborhood School Characteristic			
	School: Share Black	School: Share White	District Spending Per Pupil	Class Size (Students Per Teacher)
1($ShareBlack_{d(i)} < 0.30$)	-0.740***	0.497***	62.189	0.793***
	(0.011)	(0.013)	(38.112)	(0.182)
Control Mean	0.922	0.035	5,455.725	20.602
Sample Size	3,563	3,563	3,552	3,514

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on a range of local area school characteristics. All estimates are based on equation 1. Individual controls in the model are listed in Column 3 of Table I. The sample consists of eligible Gautreaux households who entered the program after 1981. For this analysis, we link each placement address to the nearest school and focus on measures of school racial composition, district-level spending per pupil and class size from the National Center for Education Statistics (NCES). The NCES measures are only available in the late 1980s and 1990s. We use the earliest academic year available for each characteristic (1987-1988 for school-level racial composition and class size; 1991-1992 for district-level spending). Standard errors clustered at the household level are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table IV
Effects of Desegregating Moves on Earnings (Alternative Specifications)

	(1)	(2)	(3)	(4)	(5)
	Control Mean	Estimates			Sample Size
Earnings at Ages:					
Age 24-28	11,570	2,403***	2,213***	2,341***	4,800
	(13,160)	(615)	(621)	(626)	
Age 29-33	15,230	2,684***	2,322***	2,457***	4,500
	(17,470)	(846)	(850)	(855)	
Age 34-38	17,600	2,724**	2,310**	2,425**	3,500
	(21,080)	(1,111)	(1,114)	(1,126)	
Specification Includes:					
Cohort FE		✓	✓	✓	
Tract FE		✗	✓	✓	
Individual Controls		✗	✗	✓	

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the earnings of Gautreaux children measured at several ages in adulthood. Column 1 reports the average earnings at various ages for children placed in revitalizing Black neighborhoods. Columns 2-4 report results of estimating versions of equation 1. Individual controls in the model are listed in Column 3 of Table I. All dollar amounts are U.S. $2018. The sample consists of children in Gautreaux families who entered the program after 1981. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table V
Effects of Desegregating Moves on Homeownership (Alternative Specifications)

	(1)	(2)	(3)	(4)	(5)
	Control Mean	Estimates			Sample Size
Homeowner	0.247	0.102**	0.087*	0.099**	700
	(0.432)	(0.045)	(0.045)	(0.049)	
Ever In Owner-Occupied	0.429	0.072**	0.069**	0.066**	2,000
	(0.495)	(0.032)	(0.032)	(0.032)	
Frac. Yrs. Owner-Occupied	0.365	0.078***	0.077***	0.073**	2,000
	(0.449)	(0.029)	(0.029)	(0.030)	
Specification Includes:					
Cohort FE		✓	✓	✓	
Tract FE		✗	✓	✓	
Individual Controls		✗	✗	✓	

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on measures of homeownership, as defined in Section III. The sample consists of children in Gautreaux families who entered the program after 1981 and were at least 35 years old at the time an outcome was measured. The "Homeowner" outcome is defined only for individuals who were a household head or a spouse in the 2010 Decennial Census and indicate whether they themselves or their spouse report owning their home in 2010. The "Ever In Owner-Occupied" outcome is based on MAF-ARF records and indicates living at an address in 2017-2019 which was historically owner-occupied in the 2010 Census. The "Frac. Yrs. Owner-Occupied" outcome is the fraction of years between 2017-2019 that an individual was observed at an address which was historically owner-occupied in the 2010 Census. Column 1 reports the mean of the listed outcome for children placed in revitalizing Black neighborhoods (tracts with more than 30% Black population share). Columns 2-4 report estimates from versions of equation 1. Individual controls are listed in Column 3 of Table I. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table VI
Effects of Desegregating Moves on Later-Life Neighborhood Choice (Alternative Specifications)

	(1)	(2)	(3)	(4)	(5)
	Control Mean	Estimates			Sample Size
2019 MAF-ARF Characteristic:					
Share Black	0.452	-0.099***	-0.102***	-0.098***	4,200
	(0.361)	(0.019)	(0.020)	(0.020)	
Share White	0.318	0.070***	0.068***	0.066***	4,200
	(0.285)	(0.015)	(0.015)	(0.016)	
Poverty Rate	0.202	-0.025***	-0.026***	-0.025***	4,200
	(0.132)	(0.006)	(0.006)	(0.006)	
Later-life Income Rank	0.374	0.021***	0.021***	0.020***	4,200
	(0.074)	(0.004)	(0.004)	(0.004)	
Specification Includes:					
Cohort FE		✓	✓	✓	
Tract FE		✗	✓	✓	
Individual Controls		✗	✗	✓	

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the neighborhood characteristics in children's adult neighborhood locations in 2019. The sample consists of children in Gautreaux families who entered the program after 1981. Column 1 reports the average neighborhood characteristic for children placed in revitalizing Black neighborhoods. Columns 2-4 report estimates from versions of equation 1. Individual controls are listed in Column 3 of Table I. Neighborhood location data comes from the MAF-ARF, described in Section III. Neighborhood characteristics are measured at the Census tract level. Racial composition and poverty rates come from the American Community Survey 2015-2019 estimates. The later-life income rank is a tract-level mobility measure for children whose parents were at the 25th percentile of the income distribution from the Opportunity Atlas (Chetty et al., 2018). All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table VII
Effects of Desegregating Moves on Marriage (Alternative Specifications)

	(1)	(2)	(3)	(4)	(5)
	Control Mean	Estimates			N
Married	0.288	0.054**	0.082***	0.069**	2,000
	(0.453)	(0.027)	(0.029)	(0.028)	
Married White Spouse	0.017	0.027***	0.023**	0.021**	2,000
	(0.131)	(0.010)	(0.010)	(0.010)	
Specification Includes:					
Cohort FE		✓	✓	✓	
Tract FE		✗	✓	✓	
Individual Controls		✗	✗	✓	

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on a measure of marriage, as described in Section III. The sample consists of children in Gautreaux families who entered the program after 1981 and responded to the 2010 Decennial Census as either a household head or a spouse. Marital status is determined only for Census respondents who are household heads or spouses of household heads. The outcome "Married White Spouse" is a measure of interracial marriage, given that our treatment sample is almost exclusively non-white. Column 1 reports the mean of the listed outcome for children placed in revitalizing Black neighborhoods (tracts with more than 30% Black population share). Columns 2-4 report estimates of versions of equation 1. Individual controls are listed in Column 3 of Table I. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table VIII
Effects of Desegregating Moves on Employment

	(1)	(2)	(3)
	Outcome: Frac. Years Employed at...		
	Ages 24-28	Ages 29-33	Ages 34-38
$1(ShareBlack_{d(i)} < 0.30)$	0.066***	0.043**	0.035
	(0.018)	(0.020)	(0.027)
Control Mean	0.644	0.633	0.608
Sample Size	4,500	3,500	2,200

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the employment of Gautreaux children measured at several ages in adulthood. The outcome of interest is the fraction of years employed at various ages for children placed in revitalizing Black neighborhoods. Employment is defined as having positive W2 earnings in the LEHD data, as described in Section III. All estimates are based on equation 1. The sample consists of children in Gautreaux families who entered the program after 1981. All results were approved for release by the U.S. Census Bureaus, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parenthesis. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table IX
Effects of Desegregating Moves on Earnings by Gender

	(1)	(2)	(3)
	Outcome: Earnings at...		
	Ages 24-28	Ages 29-33	Ages 34-38
Panel A. Full Sample			
1($ShareBlack_{d(i)} < 0.30$)	2,341***	2,457***	2,425**
	(626)	(855)	(1,126)
Control Mean	11,570	15,230	17,600
Sample Size	4,800	4,500	3,500
Panel B. Boys			
1($ShareBlack_{d(i)} < 0.30$)	2,002**	2,114*	2,390
	(892)	(1,203)	(1,497)
Control Mean	9,687	13,170	15,790
Sample Size	2,300	2,200	1,700
Panel C. Girls			
1($ShareBlack_{d(i)} < 0.30$)	2,426***	2,531**	2,565
	(891)	(1,164)	(1,567)
Control Mean	13,230	17,040	19,170
Sample Size	2,500	2,300	1,800

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the earnings of Gautreaux children by gender. All earnings measures are based on the LEHD data described in Section III. All estimates are based on equation 1. Individual controls in the model are listed in Column 3 of Table I. The sample consists of children in Gautreaux families who entered the program after 1981. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table X
Effects of Desegregating Moves on Later-life Neighborhoods in 2010

	(1)	(2)	(3)
	Outcome: Later-life Neighborhood (Decennial 2010)		
	Share Black	Share White	Poverty Rate
1($ShareBlack_{d(i)} < 0.30$)	-0.104***	0.076***	-0.042***
	(0.020)	(0.016)	(0.008)
Control Mean	0.500	0.305	0.240
Sample Size	3,500	3,500	3,500
	Outcome: Later-life Neighborhood (MAF-ARF 2010)		
	Share Black	Share White	Poverty Rate
1($ShareBlack_{d(i)} < 0.30$)	-0.125***	0.077***	-0.036***
	(0.018)	(0.014)	(0.007)
Control Mean	0.494	0.283	0.213
Sample Size	4,200	4,200	4,200

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the neighborhood characteristics in children's adult neighborhood locations in 2010 using distinct data sources. All estimates are based on equation 1. The top and bottom panels report results using neighborhood location data from the 2010 Decennial Census and MAFARF in 2010, respectively. Neighborhood characteristics are measured at the Census tract level and come from the American Community Survey 2015-2019. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. All standard errors are robust and clustered at the household level. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XI
Effects of Desegregating Moves on Additional Location Outcomes

	(1)	(2)
	Outcome: 2019 Location Measures	
	Same Tract as Placement	Same Tract as Parents
$1(ShareBlack_{d(i)} < 0.30)$	-0.021	-0.018
	(0.016)	(0.020)
Control Mean	0.027	0.200
Sample Size	4,200	4,200

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on location outcomes measured in 2019. All estimates are based on equation 1. Individual controls are listed in Column 3 of Table I. Column 1 reports results where the dependent variable is an indicator that an individual's Census tract in 2019 matches their initial neighborhood placement through the program. Column 2 reports results where the dependent variable is an indicator that an individual is living in the same Census tract as a parent or care-giver. The sample consists of children in Gautreaux families who entered the program after 1981. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XII
Effects of Desegregating Moves on Mortality and Incarceration

	(1)	(2)
	Outcome:	
	Mortality	Incarceration
Panel A. Full Sample		
1($ShareBlack_{d(i)} < 0.30$)	-0.004	-0.003
	(0.010)	(0.009)
Control Mean	0.046	0.044
Sample Size	5,000	5,000
Panel B. Boys		
1($ShareBlack_{d(i)} < 0.30$)	-0.025	-0.006
	(0.018)	(0.018)
Control Mean	0.066	0.067
Sample Size	2,400	2,400
Panel C. Girls		
1($ShareBlack_{d(i)} < 0.30$)	0.015	0.000
	(0.011)	(0.007)
Control Mean	0.028	0.023
Sample Size	2,600	2,600

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on measures of mortality and incarceration for all children and separately by gender. For mortality, the sample consists of all Gautreaux children who come from families that entered the program after 1981. For incarceration, the sample consists of Gautreaux children who come from families that entered the program after 1981 and who responded to the 2010 Decennial Census. Both measures are described in more detail in Section III. All estimates are based on equation 1. Individual controls in the model are listed in Column 3 of Table I. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are robust and clustered at the household level. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XIII
Effects of Placement Tract Measures of Mobility and Social Connectedness on Earnings Ages 24-28

	(1)	(2)
	Outcome: Earnings at Ages 24-28	
Income Rank (z-score)	301***	
	(109)	
Economic Connectedness (z-score)		384**
		(192)
Sample Size	4,800	4,800

Notes: This table reports the effects of the placement neighborhood mobility rate and social connectedness on long-run outcomes of children. The independent variables of interest are standardized measures of each placement neighborhood characteristic. The mobility measure in Column 1 is the predicted income rank for children whose parents were at the 25th percentile of the income distribution from the Opportunity Atlas (Chetty et al., 2018). The social connectedness measure in Column 2 captures the extent to which low- and high-socioeconomic status individuals are friends with each other based on Facebook social network data from 2019 from Chetty et al. (2022). Results were approved for release by the U.S. Census Bureau, authorization number: CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XIV
Within Gautreaux Analysis Comparing the Effects of Racial Segregation and the Effects of Poverty on Marriage to a White Spouse

	(1)	(2)	(3)
	Outcome: Married White Spouse		
Share White (z-score)	0.007**		0.006*
	(0.003)		(0.003)
Poverty Rate (z-score)		-0.009**	-0.002
		(0.004)	(0.006)
Sample Size	2,000	2,000	2,000

Notes: This table reports results from a horse-race analysis of the effects of the placement neighborhood share white and poverty rates on long-run outcomes of children. The independent variables of interest are standardized measures of each of the placement neighborhood characteristic. Column 1 reports results from a model where the only independent variable of interest is the standardized share white of residents. Columns 2 similarly reports results from a model where the only independent variable is the standardized poverty rate. Column 3 reports estimates from equation 3, which includes both the standardized share white and the standardized poverty rate. The outcome is marriage to a white spouse as measured by the Decennial Census 2010. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XV
Effects of Desegregating Moves on Earnings Ages 24-28 After Controlling for School Characteristics

	(1)	(2)	(3)
	Outcome: Earnings Age 24-28		
1($ShareBlack_{d(i)} < 0.30$)	2,341***	2,336***	2,338***
	(626)	(625)	(626)
Pupil per Teacher Ratio		-20	
		(52)	
Spending per Pupil			0.136
			(0.211)
Sample Size	4,800	4,800	4,800

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on average annual earnings of Gautreaux children measured during ages 24-28. The sample consists of children in Gautreaux families who entered the program after 1981. Column 1 reports impacts from equation 1. Columns 2 and 3 report results estimated from augmented versions of this specification that controls for alternative measures of local area school characteristics. For this analysis, we link an individual's placement address to their nearest school and focus on measures of school class size and district-level spending per pupil from the National Center for Education Statistics (NCES). The NCES measures are only available in the late 1980s and 1990s. We use the earliest academic year available for each characteristic (1987-1988 for school-level class size; 1991-1992 for district-level spending). The individual controls are listed in Column 3 of Table I. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XVI
Effects of Desegregating Moves on Household Head Mortality

	(1)	(2)	(3)	(4)	(5)	(6)
	Full Sample			Age 60+		
	Died	Died (Pre-Covid)	Died < Age 60	Died	Died (Pre-Covid)	Died < Age 60
1($ShareBlack_{d(i)} < 0.30$)	-0.017	-0.012	0.005	-0.035	-0.022	-0.009
	(0.023)	(0.021)	(0.018)	(0.029)	(0.027)	(0.023)
Control Mean	0.181	0.143	0.092	0.265	0.212	0.112
Sample Size	2,700	2,700	2,700	1,700	1,700	1,700

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the following measures of all-cause mortality for the adults in the Gautreaux sample: total, pre-COVID (prior to 2020), and mortality before age 60. All-cause mortality is measured by linking the Gautreaux population to SSA death records in the Census Numident. Columns 1–3 report results using the sample of parents or household heads in Gautreaux families that entered after 1981. Columns 4–6 only include those that were at least age 60 by the end of the sample in 2021. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184.

Appendix Table XVII
Effects of Desegregating Moves on a Parent/Head of Household's Cumulative Earnings

	(1)	(2)	(3)
	Outcome: Cumulative Earnings by...		
	Age 42	Age 47	Age 52
$1(ShareBlack_{d(i)} < 0.30)$	12,260	10,940	8,779
	(11,260)	(15,480)	(23,360)
Control Mean	189,000	268,900	334,000
Sample Size	1,500	1,200	800

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on measures of cumulative earnings for Gautreaux parents/head of households. All estimates are based on equation 1. Individual controls in the model are listed in Column 3 of Table I. All dollar amounts are U.S. $2018. The sample for all outcomes consists of parents/household heads in Gautreaux families who entered the program after 1981. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XVIII
Effects of Desegregating Moves on Future Neighborhood Choices, Excluding Parental Tract Co-resident Children

	(1)	(2)	(3)	(4)
	Outcome: Later-life Neighborhood (MAF-ARF 2019)			
	Share Black	Share White	Poverty Rate	Later-life Income Rank
Panel A. Gautreaux Base Sample				
1($ShareBlack_{d(i)} < 0.30$)	-0.098***	0.066***	-0.025***	0.020***
	(0.020)	(0.016)	(0.006)	(0.004)
Panel B. Gautreaux Sample Excluding Living in Parent Tracts				
1($ShareBlack_{d(i)} < 0.30$)	-0.109***	0.077***	-0.024***	0.021***
	(0.020)	(0.016)	(0.006)	(0.004)

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the neighborhood characteristics in children's adult neighborhood locations in 2019. Panel A reproduces the results from Table IV which are based on our main sample of children who entered the program after 1981. Panel B repeats the specification for a sample that excludes children who are living in the same Census tract as their Gautreaux parents/care-giver in 2019. Neighborhood location data comes from the MAFARF, as described in Section III. Neighborhood characteristics are measured at the Census tract level and come from the American Community Survey 2015-2019 estimates. The later-life income rank in adulthood is a tract-level mobility measure for children whose parents were at the 25th percentile of the income distribution from the Opportunity Atlas (Chetty et al., 2018). All standard errors are robust and clustered at the household level. Results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XIX
Exposure Effects of Desegregating Moves on Earnings (Household Fixed Effect Estimates, Alternative Specifications)

	(1)	(2)	(3)	(4)	(5)	(6)
	Outcome: Earnings at...					
	Ages 24-28	Ages 24-28	Ages 26-28	Ages 26-28	Ages 29-33	Ages 29-33
1(% Black < 30) × 1(Younger)	4,659***	4,716**	5,770***	5,824***	6,049**	6,078**
	(1,802)	(1,858)	(1,968)	(2,031)	(2,474)	(2,500)
Individual Controls	✓	✗	✓	✗	✓	✗
Control Mean	11,570	11,570	12,690	12,690	15,230	15,230
Control SD	13,160	13,160	14,720	14,720	17,470	17,470
Sample Size	3,800	3,800	3,800	3,800	3,500	3,500

Notes: This table reports estimates from the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the earnings measured at various ages. Columns 1, 3, and 5 report results based on equation 2. Individual controls for place of birth, birth year, and gender are included in these results. Columns 2, 4, and 6 report results where the individual-level controls are removed but household fixed effects are included. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XX
Effects of Desegregating Moves on Earnings, Main and Sibling Sample Estimates

	(1)	(2)
	Earnings at Ages 24-28	Earnings at Ages 24-28
$1(ShareBlack_{d(i)} < 0.30)$	2,341***	2,482***
	(626)	(724)
Sample	Base	HH FE
Sample Size	4,800	3,800

Notes: This table reports estimates from the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on the earnings at ages 24-28. All results are based on equation 1. Column 1 reproduces the results from the main sample from Table III. Column 2 reports results after restricting the sample to children included in our sibling fixed effects analysis. All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY24-0184. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XXI
Alternative Specifications and Samples

	(1)	(2)	(3)	(4)	(5)	(6)
	Alternative Specifications/Samples:					
	Base	First Offer	Exclude 1990s	Include 1970s	Low Vacancy	Suburb
Earnings at Age 24	2,561***	2,346***	2,342***	2,312***	2,096***	2,084***
	(580)	(689)	(641)	(580)	(793)	(551)
	[N=4,700]	[N=3,300]	[N=3,100]	[N=4,900]	[N=1,500]	[N=4,700]
Earnings at Age 24-28	2,184***	1,884***	2,241***	1,990***	2,252***	1,982***
	(634)	(774)	(708)	(630)	(876)	(591)
	[N=4,700]	[N=3,300]	[N=3,100]	[N=5,000]	[N=1,600]	[N=4,700]
MAF-ARF 2019, Share Black	-0.098***	-0.118***	-0.088***	-0.100***	-0.069***	-0.111***
	(0.020)	(0.025)	(0.021)	(0.019)	(0.026)	(0.017)
	[N=4,200]	[N=2,900]	[N=2,500]	[N=4,400]	[N=1,300]	[N=4,200]
MAF-ARF 2019, Inc. Rank in Adulthood	0.020***	0.022***	0.019***	0.021***	0.017***	0.025***
	(0.004)	(0.005)	(0.004)	(0.004)	(0.005)	(0.004)
	[N=4,200]	[N=2,900]	[N=2,500]	[N=4,400]	[N=1,300]	[N=4,200]

Notes: This table reports the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on key long-run outcomes of children. Column 1 reports results based on equation 1 using the base sample consisting of children in Gautreaux families who entered the program after 1981. All outcomes are described in detail in Section III. Columns 2-6 provide estimates based on alternative specifications and samples. These results draw from a prior U.S. Census Bureau disclosure, which relied on an earlier vintage of LEHD data covering 22 states and included records up through 2014. For this reason, the earnings results in Column 1 differ from those reported in Table III. Columns 2-5 provide results where we vary the base sample by: only considering those who accepted their first housing offer through Gautreaux (Column 2); excluding those placed during the 1990s (Column 3); including households placed before the 1981 consent decree (Column 4); or including those who were placed during years when Chicago's housing market had relatively low vacancy rates (Column 5). The table also reports results from an alternative specification where we define treatment as being placed in a suburban Census tract (Column 6). All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XXII
Main Results and Multiple Hypothesis Testing Adjustment

Dependent Variable	(1) Estimate	(2) Sample Size	(3) Pairwise p-value	(4) FDR Adjusted
Earnings at Ages 24-28	2,341	4,800	< 0.01	< 0.01
	(626)			
Homeownership	0.099	700	0.048	0.073
	(0.049)			
Later-life Neighborhood % Black	-0.098	4,200	< 0.01	< 0.01
	(0.020)			
Married	0.069	2,000	0.018	0.037
	(0.028)			
Mortality	-0.004	5,000	0.985	0.985
	(0.211)			
Incarceration	-0.003	5,000	0.741	0.889
	(0.009)			

Notes: This table reports an analysis of the effects of placement in a predominantly white neighborhood (i.e., a Census tract with less than 30% Black population share) on long-run outcomes of children that accounts for multiple hypothesis testing. Columns 1 and 2 reproduce estimates and statistics from our main tables. Columns 3 and 4 report the per-comparison (pairwise) and false discovery (FDR) adjusted p-values, also known as "q-values" in Anderson (2008). The FDR-adjusted p-values control for the number of false positives when multiple hypotheses are tested. These adjusted p-values are calculated using the two-step procedure from Benjamini, Krieger, and Yekutieli (2006).

Appendix Table XXIII
Gautreaux vs. MTO: Comparison of the Effects of Racial Desegregation and the Effects of Income Desegregation on Later-life Neighborhoods

	(1)	(2)	(3)	(4)
	Outcome: Later-life Neighborhood (MAF-ARF 2019)			
	Share Black	Share White	Poverty Rate	Later-life Income Rank
Panel A. Gautreaux				
1($ShareBlack_{d(i)} < 0.30$)	-0.098***	0.066***	-0.025***	0.020***
	(0.020)	(0.016)	(0.006)	(0.004)
Sample Size	4,200	4,200	4,200	4,200
Panel B. MTO				
$TakeExp_i$	-0.014	0.026	-0.023*	0.006
	(0.024)	(0.023)	(0.012)	(0.005)
Sample Size	4,600	4,600	4,600	4,600
Estimated Diff.	-0.084***	0.040	-0.003	0.015**
	(0.031)	(0.028)	(0.014)	(0.006)

Notes: This table compares the impacts of relocating through the MTO and Gautreaux programs on the neighborhood characteristics of children's adult neighborhood locations in 2019. Panel A reports the estimates from the Gautreaux analysis. Columns 1-4 reproduces the results from equation 1 for the four neighborhood characteristics reported in Table IV. Panel B reports the TOT estimates of the effects of moving with an Experimental low-poverty voucher in MTO on neighborhood characteristics in 2019. The bottom row reports the estimated difference between the point estimates in Panels A and B. All neighborhood location data comes from the MAF-ARF in 2019, described in Section III. Neighborhood characteristics are measured at the Census tract level and come from the American Community Survey 2015-2019 estimates. The later-life income rank outcome is a tract-level mobility measure for children whose parents were at the 25th percentile of the income distribution from the Opportunity Atlas (Chetty et al., 2018). All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. Standard errors are clustered at the household level and are reported in parentheses. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Appendix Table XXIV
Gautreaux vs. MTO: Comparison of the Effects of Racial Desegregation and the Effects of Income Desegregation on Later-life Neighborhoods (at Age 26)

	(1)	(2)	(3)	(4)
	Outcome: Later-life Neighborhood (MAF-ARF at Age 26)			
	Share Black	Share White	Poverty Rate	Later-life Income Rank
Panel A. Gautreaux				
1($ShareBlack_{d(i)} < 0.30$)	-0.125***	0.085***	-0.039***	0.028***
	(0.028)	(0.021)	(0.010)	(0.005)
Sample Size	2,400	2,400	2,400	2,400
Panel B. MTO				
$TakeExp_i$	-0.042*	0.054**	-0.043***	0.014***
	(0.025)	(0.023)	(0.013)	(0.005)
Sample Size	4,100	4,100	4,100	4,100
Estimated Diff.	-0.083**	0.031	0.004	0.014*
	(0.037)	(0.031)	(0.017)	(0.007)

Notes: This table compares the impacts of relocating through the MTO and Gautreaux programs on the characteristics of neighborhoods where children resided at age 26. Later-life neighborhood characteristics are based on neighborhood locations in the MAF-ARF at age 26. Panel A reports the estimates from the Gautreaux analysis. Columns 1-4 reproduces the results from equation 1 for the four neighborhood characteristics reported in Table IV. Panel B reports the TOT estimates of the effects of moving with the experimental low-poverty voucher in MTO on neighborhood characteristics at age 26. The bottom row is the estimated difference between the point estimates in Panels A and B. All neighborhood location data comes from the MAF-ARF, as described in Section III. Neighborhood characteristics are measured at the Census tract level and come from the American Community Survey 2015-2019 estimates. The later-life income rank outcome is a mobility measure for children whose parents were at the 25th percentile of the income distribution from the Opportunity Atlas (Chetty et al., 2018). All results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018. All standard errors are robust and are clustered at the household level. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

B. DATA APPENDIX

B.1. Details on the Census Match

In this appendix, we evaluate whether our data linkages are correlated with placement into the predominantly white neighborhoods targeted by the Gautreaux program (i.e., neighborhoods where the Black population share was less than 30 percent). Appendix Table XXV reports the results of regressing an indicator of successful data linkage on an indicator for being placed in a predominantly white neighborhood. In Column 1, we use the sample of all adults and children in Gautreaux households and regress whether the individual was assigned a PIK on our measure of treatment. Overall, 90.2 percent of persons in Gautreaux households are assigned a PIK. Individuals placed in white neighborhoods were 1 percentage point less likely to have a PIK, but this difference is not statistically different than zero. Column 2 shows that the PIK rate for children is slightly lower at 86.2 percent, but, again, being assigned a PIK is not correlated with being placed in a white neighborhood.

Of the sample of Gautreaux children with PIKs, 67.4 percent responded to the 2010 Census. The 2010 Census provides our measures of marriage, homeownership, and incarceration. In Column 3, we show that being placed in a predominantly white neighborhood is not correlated with the likelihood of responding to the 2010 Census.

Our results on later-life neighborhood characteristics rely on addresses from a match to an administrative address panel, the MAF-ARF. The sample of Gautreaux children with a PIK, matches to the 2010 MAF-ARF, at a rate of 79.4 percent. In 2019, the match rate increases to 81.1 percent, which reflects higher match rates at older ages and improvements to the address panel over time. In Columns 4 and 5, we find no evidence that being placed in a predominantly white neighborhood significantly impacts the likelihood of appearing in the MAF-ARF in either 2010 or 2019. Column 6 reports the same likelihood for appearance in the MAF-ARF at age 26. Because MAF-ARF coverage is limited prior to 2007, the fraction of Gautreaux children who have an address at age 26 is lower at 32.2 percent.

The marriage and homeownership variables are only available for household heads and spouses. For those that responded to the 2010 Census, Column 7 shows that 59.8 percent were household heads or spouses. This percentage increases to 83.3 percent if we restrict our sample to individuals who were 35 years of age or older in 2010, which is the subsample we use to evaluate impacts on homeownership in Section V. Again, placement into a predominantly white neighborhood is not significantly correlated with appearance as a head of household or as a spouse in the 2010 Decennial Census.

Appendix Table XXV
Census Match Results

	Outcome:			
	Has PIK	Has PIK	Has 2010 Census	Has 2010 MAFARF
	(1)	(2)	(3)	(4)
1($ShareBlack_{d(i)} < 0.30$)	-0.011	-0.017	0.011	0.026
	(0.009)	(-0.017)	(0.021)	(0.017)
Sample Size	10,000	6,300	5,000	5,000
Sample	All	Children	Had PIK	Had PIK
Dep. Var. Mean	0.902	0.862	0.674	0.794
Specification Includes:				
Tract FE	✓	✓	✓	✓
Individual Controls	✗	✗	✗	✗

	Outcome:			
	Has 2019 MAFARF Tract	Has Age 26 MAFARF Tract	Head or Spouse in Census 2010	Head or Spouse in Census 2010
	(5)	(6)	(7)	(8)
1($ShareBlack_{d(i)} < 0.30$)	0.007	0.010	-0.021	-0.044
	(0.017)	(0.019)	(0.026)	(0.050)
Sample Size	5,000	5,000	3,300	650
Sample	Had PIK	Had PIK	In Census	In Census: Age 35+
Dep. Var. Mean	0.811	0.322	0.598	0.833
Specification Includes:				
Tract FE	✓	✓	✓	✓
Individual Controls	✗	✗	✗	✗

Notes: This table reports the relationship between placement in a predominantly white (less than 30% Black) Census tract and indicators reflecting data linking and missing data. Further details are provided in Appendix Section B.1. Standard errors are clustered at the household level and are reported in parentheses. Results were approved for release by the U.S. Census Bureau, authorization number CBDRB-FY22-CES018-018.