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Ec 1152

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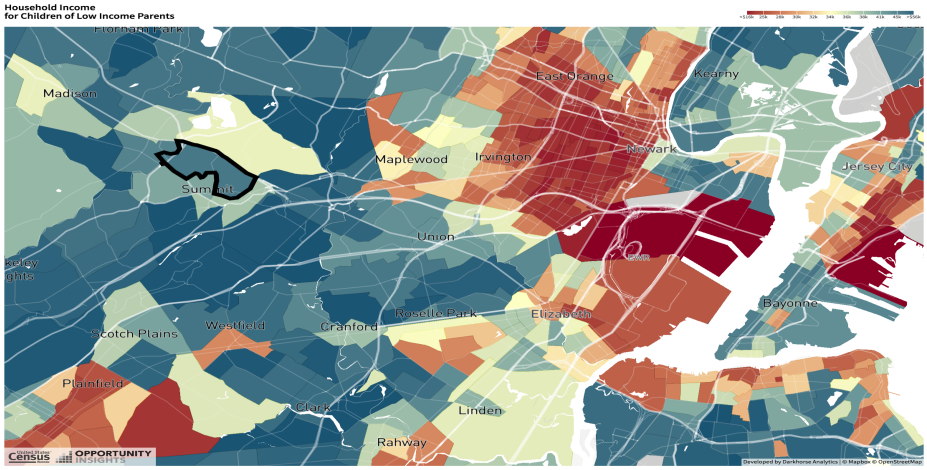
Empirical Project 1

My hometown, Summit, is located in Union County, New Jersey. It has a reputation of being a fairly well-off town with strong links to Wall Street, as 20% of its residents work in finance and real estate (Patterson 2008). Its train station is a part of NJ Transit's Midtown Direct service, which operates express trains to Penn Station (Carter 2018). The Regional Plan Association found in 2010 that this service boosted property values in Summit by $23,000 for houses within walking distance of the train station (Carter 2018). Summit has a top-25 public school system in the state and is located close to many secular/religious private schools (U.S. News 2018). Summit's downtown suffered a downtown in the recession (Patterson 2008), but as of early 2019, its retail vacancy rate had decreased to 1.3% (Radest 2019). On the surface, Summit is resurgent and thriving.

In many outcomes, Summit is ahead of the rest of Union County. Of the 108 Census tracts within the county, Summit's tracts rank 2nd, 31st, 45th, and 53rd in the pooled household incomes of low-income children (`kfr_pooled_p25`). When displayed cartographically, Summit's outcomes for low-income children appear better than those of many other towns in the county (which are located to the southeast of Summit).

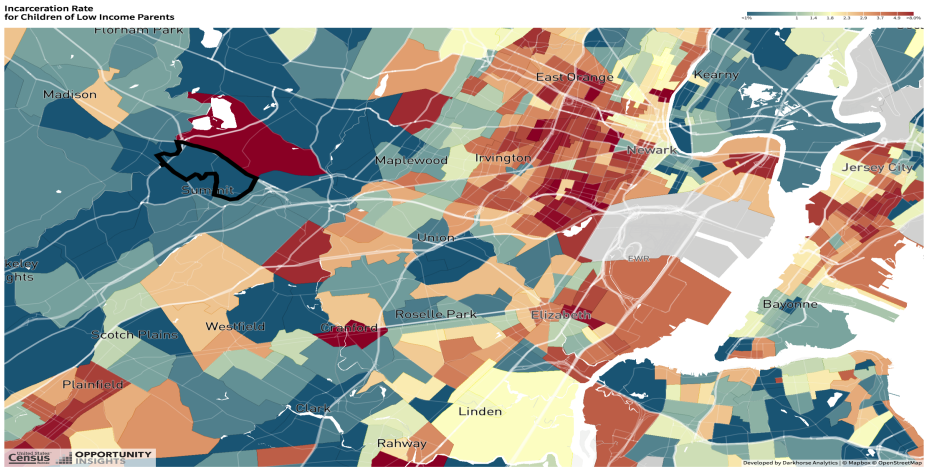
Figure 1: Household Income among Low-Income Children in North Jersey



When looked at through another metric, such as incarceration rates among low-income children, Summit

still appears ahead of the pack. Within Union County, Municipalities like Cranford and Elizabeth have considerably worse outcomes than Summit. Stretching outward, the area around Newark, while located outside Union County, has strikingly worse outcomes in both household income and incarceration rates for low-income children.

Figure 2: Incarceration Rates among Low-Income Children in North Jersey



The Opportunity Atlas data looks at children born between 1978 and 1983 and provides insights on their outcomes through adulthood. Using this data to look at Summit's outcomes may be misleading, since Summit itself has changed since the 1980s. After a population boom in the 1950s, the population began to precipitously decline in the 1970s. This decline continued until the late 1990s, but the city's population has yet to reach its high of 23,677 in 1960 (Census Data). Many in Summit believe that the city's population recovery was accompanied by fundamental changes in the town's identity, completing a transition into an upper-class Wall Street exclave in Union County.

Using the Opportunity Atlas, the average household income for children in the 25th, 75th, and 100th percentiles can be calculated using `kfr_pooled_p25`, `kfr_pooled_p75`, `kfr_pooled_p100`. These means, along with their standard deviations in parentheses, are displayed for my home tract, Union County, New Jersey, and the entire nation in Table 1. Since a single tract cannot have a standard deviation, I calculated the standard deviation of Summit's 4 tracts for the table.

Regardless of a child's percentile at birth, the average household income in my home tract is substantially higher than that of Union County, New Jersey, and the country. Union County itself is relatively average compared to the state totals (for each percentile rank), and New Jersey is slightly better-off than the rest of the country in each rank. The standard deviations in this table are also of interest because they denote mobility. My home tract has above-average mobility for children born in the 25th percentile, but that mobility

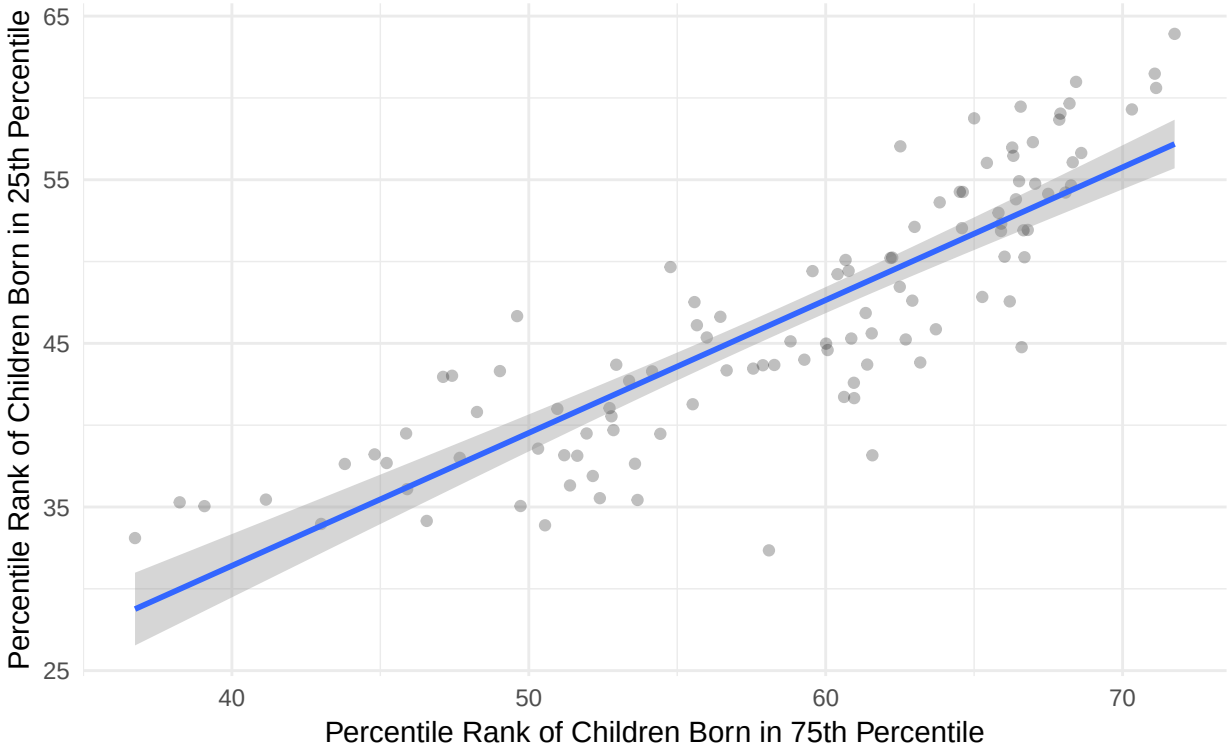
falls as we look at higher percentiles. When looking at the 100th percentile, there is remarkably low mobility compared to Union County, New Jersey, and the country. This finding implies that children born into very wealthy families in my tract remained wealthy throughout life.

Table 1: Outcome Matrix with Means and Standard Deviations

Percentile	Tract	County	State	Nation
25th	$44720 ($10102)	$38826 ($9659)	$38994 ($9603)	$34312 ($7900)
75th	$67314 ($7961)	$54874 ($12267)	$55344 ($11126)	$51276 ($9308)
100th	$91295 ($5303)	$71265 ($17588)	$72060 ($15474)	$69218 ($16363)

Figure 3: Upward Mobility in Union County, NJ

Percentile Rank Data from Opportunity Atlas



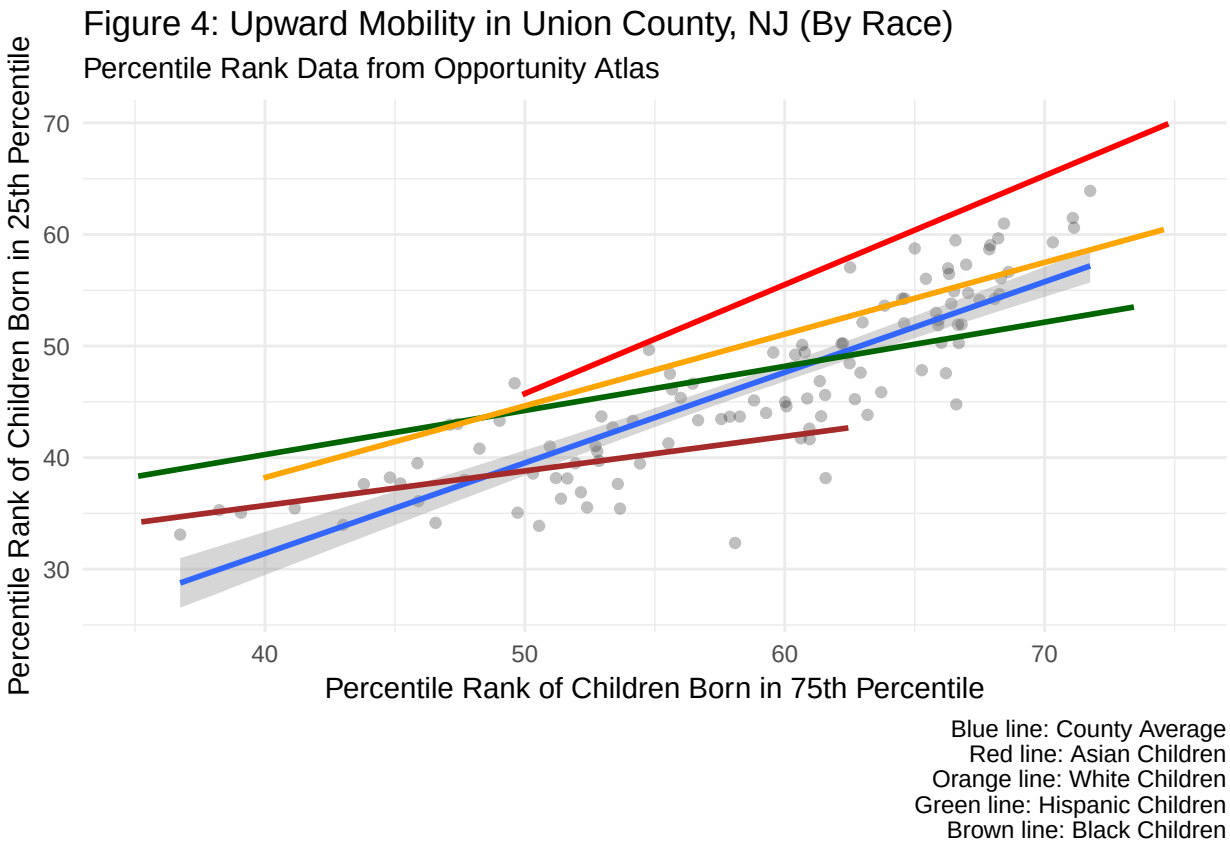


Table 2 presents three covariates of ranked income among children born into the 25th percentile. I chose three covariates to analyze: `foreign_share2010`, `singleparent_share2000`, and `singleparent_share2010`.

Table 2: 95% Confidence Intervals for Correlation Coefficients of Covariates

Covariate	Lower Bound	*Coefficient*	Upper Bound
Share of Population Born Outside the U.S. in 2010	-0.304	*-0.224*	-0.143
Share of Single-Headed Households with Children in 2000	-0.485	*-0.419*	-0.354
Share of Single-Headed Households with Children in 2010	-0.303	*-0.247*	-0.192

First, I calculated the correlation between the foreign-born population share in each Union County tract and percentile rank of children born into the 25th percentile (the coefficient from `ranks_pooled_p25 ~ foreign_share2010`). There is a significant negative coefficient of -0.224 (95% confidence intervals are

detailed in Table 2). Union County has a substantially higher foreign-born population share than the average Census tract (0.29 versus 0.13 nationwide). The negative correlation suggests that poorer immigrants in Union County do not see much mobility. Indeed, when looking at percentile ranks, it appears that their children are in many cases worse-off than their parents.

Second, I looked at the share of single-headed households with children in 2000 (the coefficient from `ranks_pooled_p25 ~ singleparent_share2000`). This significant negative relationship has a correlation coefficient of -0.419.

Third, I looked at the share of single-headed households with children in 2010 (the coefficient from `ranks_pooled_p25 ~ singleparent_share2010`). The relationship here is also signficant and negative, with a coefficient of -0.247, but the impact is smaller than from 2000. This makes sense logically: the children whose outcomes are being analyzed were born around 1980, so the share of single parents in 2010 should not have as much of an effect on outcomes as the share in 2000.