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## *'Historic' After 'Hazardous': Racial Equity Impacts of Historic District Designation in Redlined Jersey City Neighborhoods, 1970 – 2020*

### *Introduction*

In 1939, the federal Home Owners' Loan Corporation (HOLC) redlined virtually every neighborhood in Jersey City as ineligible for home loans, barring future generations of the city's predominantly Black, brown, and immigrant population from access to mortgages and housing stability. Eighty years later, few Jersey City residents own their homes. Instead, over 70% are renters — a figure significantly higher than in New York City (66.8%) or San Francisco (61.8%), and nearly twice the average of urban areas nationwide.<sup>1</sup> Jersey City is also starkly spatially segregated<sup>2</sup> by both race and wealth; in 2021, median incomes in Black Jersey City households averaged less than half those of their white neighbors.<sup>3</sup> The latter cluster in Jersey City's wealthy Downtown district, a glossy stretch of waterfront high-rises and brownstones nicknamed the "Gold Coast" by real estate speculators<sup>4</sup> and separated by Route 78 from longtime Black and Latinx neighborhoods to the west. But in 1939, the "Gold Coast", too, was uniformly redlined 'Hazardous'. What interim policy decisions caused some of Jersey City's "D"-graded neighborhoods to diverge so dramatically, eighty years on, leaving others with few city amenities beyond that of literal condemnation?

This paper seeks to inform local-level, anti-racist housing policy by tracing aggregate patterns of income, tenure, and race across Jersey City census tracts the HOLC once redlined "D" ("Hazardous") or "C" ("Definitely Declining"), looking both at commonalities across their census data profiles today and key moments in the past when groups of redlined tracts noticeably diverge. While necessarily limited in scope, both a literature review and an independent data analysis of fifty most recent years of tract-level decennial census data suggest one City action that introduced even more heightened disparities within already-redlined neighborhoods: that of local-level historic districts designation in and around 1980. In 1970, thirty years after the HOLC colored it red, Downtown's "hazardous" census tracts closely resembled the rest of the city's redlined neighborhoods in variables household income and proportion of Black homeowners, but rapidly lost those homeowners (while diverging into much wealthier, much whiter enclaves) *after* Jersey City re-mapped them as historic preservation districts.

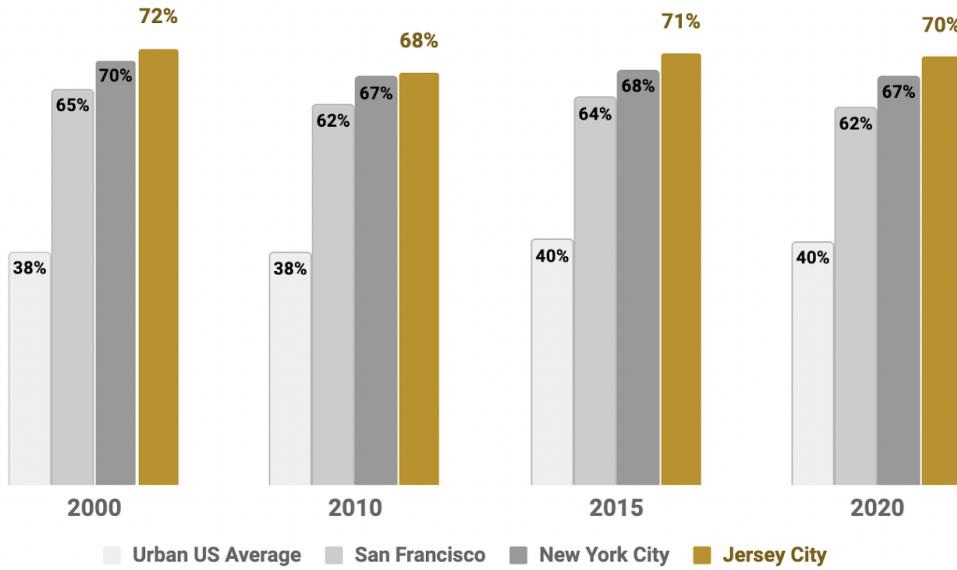
### *Background Context*

#### *Jersey City Histories*

Jersey City, which occupies most of Hudson County, was so heavily redlined in 1939 that Kenneth Jackson describes it in *Crabgrass Frontier* as a place that "HOLC appraisers had decided ... was a lost cause. In [Hudson County] and Jersey City, taken together, they designated only two very small Second grade areas and no First grade sections".<sup>5</sup> Twenty years later, the results were already evident: "Hudson County residents received only twelve dollars of [FHA Home] mortgage per capita through 1960, the second lowest county total in the nation

## Nearly 3 in 4 Jersey City Households Rent — More Than in Many Major American Cities.

U.S. Census: Decennial (2000) & ACS 5-year (2010 - 2020) estimates of rental-occupied units within all occupied housing units.



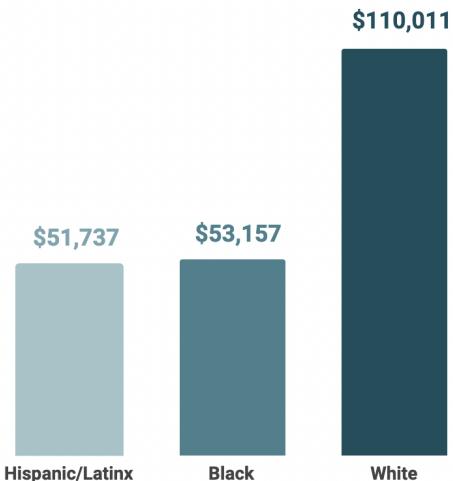
after the Bronx” (Jackson, 1985, 211). By 1968, the Kerner Commission reported white Jersey City homeownership rates 150% higher than those of Black residents (whom it also noted were already experiencing significantly higher levels of rent burden than white Jersey City residents by 1968).<sup>6</sup>

Both the rents, and the burdens, have increased since. Eight months ago, the *New York Times* announced it had found America’s single most expensive city for renters. “Which City? You Might Be Surprised”, ran the headline.<sup>7</sup> The answer was, and is, Jersey City: “topping famously expensive metros like San Francisco” (and, of course, New York) “with an average rent of \$5,500”. The rents are high, and as noted above, nearly three out of every four Jersey City households are paying them. Almost half (47%) of Jersey City tenants are also cost-burdened by HUD standards, charged more than 30% of every paycheck in rent.<sup>8</sup> The Jersey City Housing Authority reports this month that there are “nearly 15,000 Jersey City households earning between 0% and 30% of the median family income and only 7,310 housing units affordable for these households”; the agency’s public housing waitlist has been closed since 2018, and is 22,855 qualified families long. More than half of those waiting families are Black.<sup>9</sup>

*Policy Relevance.* With a pandemic-era housing and eviction crisis still in full swing,<sup>10</sup> and mayoral and council elections just around the corner, activists and public officials regularly cite connections between Jersey City’s inequitable present and its redlined past<sup>11</sup>. In the wake of the University of Richmond’s *Mapping Inequality* project, which digitized modern-day geographic boundaries for hundreds of early twentieth-century HOLC maps of cities across the country, some policymakers have begun fitting reparations efforts within the geographic boundaries of formerly-redlined neighborhoods (multiple 2020 presidential housing platforms suggested variations of this concept).<sup>12</sup> But while the precise coordinates of 1940-era redlining are easy to pin over modern cityscapes, including that of Jersey City — *Mapping Inequality* even provides these ready-fitted to both 2010 and 2020 census tract boundaries — the impact of redlining on those neighborhoods eighty years later is much harder to

trace: after all, one of its most widely-documented impacts was that of displacement. Some recent studies even suggest that a static neighborhood boundary's former redlining status is not, in itself, a statistically significant proxy indicator for its contemporary housing characteristics: the Urban Institute recently found that "Redlining has inconsistent and low to moderate correlation with many measures of current housing instability",<sup>13</sup> in part because the practice's devastating impacts rippled far beyond the spatial and temporal boundaries captured by a shapefile layer. In this sense the harm of redlining is better measured across rather than within spatial boundaries: as Urban Placement Project director Tim Thomas observed in 2021, "Redlining ... is the kind of evil that has been attached to the people that it was attacking; it has followed them for generations".<sup>14</sup> A closer investigation of how and where Jersey City's redlined neighborhoods diverged from their non-redlined counterparts — and, crucially, which Jersey City planning and policy decisions appear to have made redlined neighborhoods even less accessible to Black and low-income residents — is overdue<sup>1</sup>.

**Last year in Jersey City, Black and Hispanic/Latinx household incomes were less than half those of white households.**



Source: 2021 ACS 5-year estimates of median household income (S1903).

### *Analysis: Scholarship on Equity Impacts of Redlining & Historic District Designation*

*Redlining.* A robust body of research links this kind of housing shortfall, racial stratification, and income inequity directly to redlining. While contemporary census tract boundaries do not fit perfectly over those used by HOLC eight decades earlier, the University of Richmond's spatial data layers make it possible to isolate 2020-era tracts whose geographic boundaries contain at least 50% formerly-redlined area. The National Community Reinvestment Coalition analyzed such tracts in 140 cities across the United States, finding that 74% of neighborhoods the HOLC graded "D" eighty years ago are low-to-moderate income today, and 64% are "minority neighborhoods"; they also found "significantly greater economic inequality in cities where more of the HOLC-graded 'Hazardous' areas are currently minority neighborhoods".<sup>15</sup> The Brookings Institute used similar methodology on even more finely-grained block group estimates, concluding that formerly-redlined blocks on average contain "higher Black and minority shares of population than the remainder of the city ... lower median household income, lower home values, older housing stock, and rents which are lower in absolute terms (but often higher as a percentage of income)".<sup>16</sup> Other recent studies find statistically significant correlations between a census tract's eighty-year-old redlining status and a host of other contemporary social, environmental, and health outcomes. In 2020, Nancy Krieger and colleagues ran a complex, multilevel statistical model across New York

<sup>1</sup> [Reader: it was.—ed.]

City census tracts and found that the risk of preterm birth remained one-and-a-half times higher in tracts once graded “D” by the HOLC, even when adjusting for other neighborhood conditions;<sup>17</sup> that same year, a *Lancet* study found that modern-day asthma-related emergency department visits were 2.4 times higher in tracts the HOLC had redlined.<sup>18</sup>

*Historic Districting.* A less-discussed avenue that policymaker maps impact neighborhood racial equity, albeit one highly relevant in Jersey City’s local context,<sup>19</sup> is that of historic districting. As outlined by Christopher Silver, the first urban zoning ordinance in the nation to designate a protected historic district—in Charleston, South Carolina—did so explicitly to skirt federal prohibitions against racial zoning; the plan “delineated separate residential districts for Blacks and Whites”, and “testimony of local preservationists indicates that displacement of Blacks from the historic area was one of the implicit goals” of the ordinance.<sup>20</sup> More recently, NYU’s Furman Center found that “63 percent of [New York City] residents in tracts mostly covered by historic districts were white, compared with 30 percent in tracts not at all covered by a historic district”.<sup>21</sup> Furman’s director, Ingrid Gould Ellen, published a separate analysis further concluding that historic districts develop significantly greater concentrations of higher-income and college-educated residents in the years after historic designation.<sup>22</sup> Edward Glaeser’s study of New York City historic designation draws starker conclusions, finding that “over the entire 1980–2002 period, [condo] prices each year rose \$6,000 more in historic districts than outside them”.<sup>23</sup> Between 1977 and 1982, Jersey City designated four such districts across overlapping census tracts near its waterfront, blanketing all of the Downtown square footage the Home Owner’s Loan Corporation had marked “D” for “hazardous” forty years before.

### *Analysis: Census Data Characteristics of Jersey City Redlined Neighborhoods, 1970 – 2020*

*Methodology.* To scratch some surfaces of how people in Jersey City’s formerly redlined neighborhoods have been impacted by redlining decades after the HOLC drew those maps, I downloaded the *Mapping Inequality* project’s Hudson County redlining polygon layer and calculated its overlap with standard 2020-era TIGER/Line U.S. census tracts (see Appendix B, along with and R code in Appendix C, for details on getting this to work). I assigned each of Jersey City’s 77 census tracts a majority HOLC grade corresponding to whichever of “B”, “C”, or “D” had been assigned to more than 50% of its modern-day square footage in 1939. Of these, I followed existing precedent by designating all tracts whose majority was red (D, “Hazardous”) and/or yellow (C, “Definitely Declining) as “Redlined”. With each tract’s majority HOLC designation, I was able to average citywide census estimates for the pool of all redlined census tracts at ten-year intervals from 1970 through 2020, comparing them both with their own estimates at different points in the timeseries as well as those of tracts that had not been majority redlined.

*Findings.* A standard “Limitations” section for this project would take more pages than this paper’s entirety — patterns apparent in the following quick summary analysis are emphatically neither causal nor statistically robust — but they are nonetheless fascinating, with as much scope for qualitative, community-powered narrative research as for more granular statistical modelling. Much like other, more detailed studies, this project’s comparisons of 2020 housing, race, and income estimates between Jersey’s 51 redlined tracts and 26 un-redlined tracts suggested a consistent gap between the two, eighty years after redlining. In 2020, Jersey City median

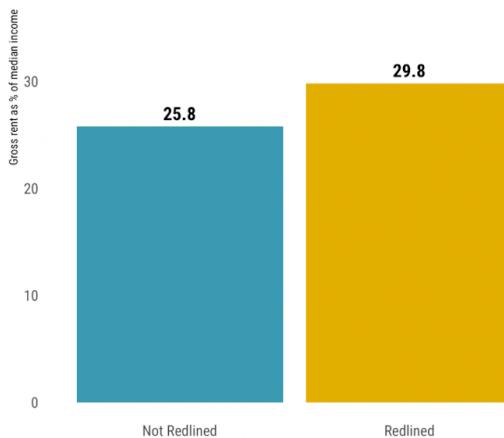
household income was almost \$15,000 dollars higher in tracts that the HOLC had not barred from home loans. The average population of formerly redlined tracts was approximately 13% Black, but almost half that in non-redlined neighborhoods (where Black residents make up about 7% of the tract). Proportions of Black, white, and Latinx homeownership differed by a maximum of about four percentage points between averaged redlined and non-redlined areas of Jersey City, and the differences in tenure overall were comparatively slight — the average redlined census tract contained about 28% homeowners, while the average non-redlined tract held a slightly *higher* number, at about 30%.

*Historic Zoning.* While the scope of this study does not permit extensive statistical analyses of variance between redlined and non-redlined census tracts (at minimum, one would need to source and include a rigorous set of control variables to account for the many factors that go into Jersey City's racial and income disparities), it's nonetheless immediately clear to anyone familiar with the city that its formerly-redlined districts are not uniform. The median household income across Jersey City's five locally-designated historic districts is nearly double that of the rest of the city's non-designated tracts, and four of the five are clustered in a blanket over all of Jersey City's currently affluent, formerly "Hazardous" census tracts.

*Designation & Redlining.* Even at a basic summary-statistic level, without running any testing for causal inference, splitting Jersey City's redlined census tracts into historically-designated and non-historically designated subsets exposes a clear racial and income equity gap among redlined Jersey City neighborhoods themselves. This was first apparent when looking at contemporary 2020 5-year American Community Survey estimates of tenure, income, race averages across redlined tracts. After subsetting for differences in historic designation, a substantial income gap develops within neighborhoods graded "C" or "D"; as noted above, citywide median income is about \$15,000 lower in formerly redlined tracts than those that were not redlined — but redlined *and* historically designated tract households make on average *\$76,000* more per year than in redlined, but not

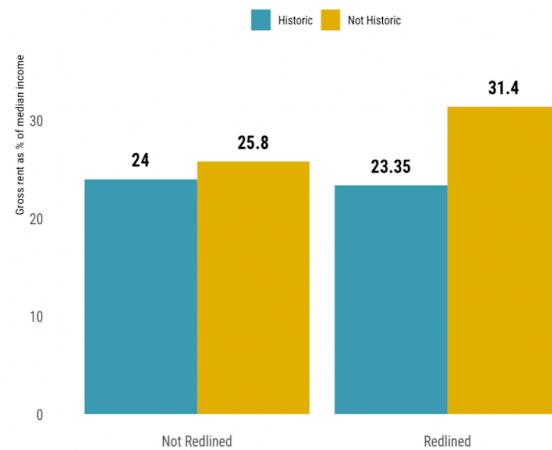
### Rent takes 4% more out of household income in Jersey City redlined neighborhoods ...

2020 gross rent as percentage of household income in Census tracts that were majority-graded 'Hazardous' or 'Definitely Declining' by HOLC.



### ... but within redlined areas, historic district status means gaining or losing twice that.

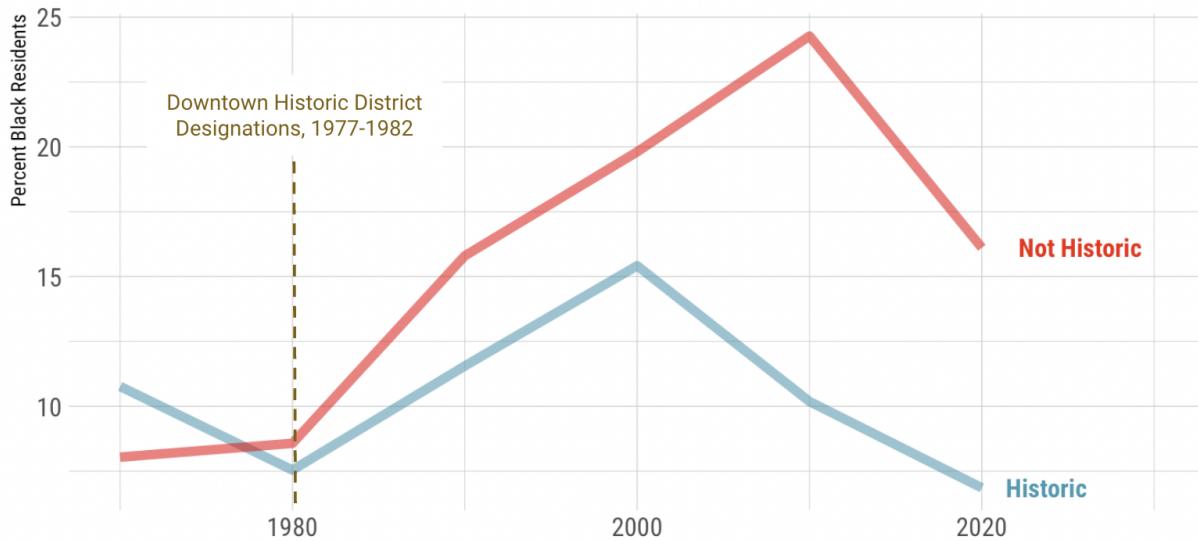
Gross rent as percentage of household income in Census tracts majority-graded 'Hazardous' or 'Definitely Declining' by the HOLC.



Source: U.S. Census Bureau 2020 ACS 5-yr estimates; tract-level HOLC grades of 'C' or 'D' digitized by University of Richmond; Jersey City historic district boundaries via data.jerseycitynj.gov.

## Redlined Jersey City Census Tracts' Average Percentages of Black Residents, by Historic District Designation Status

Via decennial Census estimates of tract-level black population, 1970-2020.



Source: 2020 estimates imputed from ACS 5-yr; 1970-2010 U.S. Census decennial estimates fitted to 2010 census boundaries by Neighborhood Change Database; tract-level HOLC grades digitized by University of Richmond; Jersey City historic district boundaries via data.jerseycitynj.gov.

historic-districted, neighborhoods of Jersey City. If we use redlining alone to measure differences in housing tenure by race across the city, 2020 tract averages show about 30 more white homeowner households and ten fewer Black homeowner households in redlined than non-redlined neighborhoods. When comparing historically-designated tracts *within* redlined areas, however, that gap widens significantly: redlined and historically-districted Jersey City census tracts average 152 more white households, and 37 fewer Black households, than redlined tracts in the rest of the City. Interestingly, this project's analysis of census estimates for median year housing was built indicates that, among formerly "D"-graded Jersey City census tracts, housing is actually 17 years older when a tract is *not* historically districted than when it's "D"-graded but then designated historic. Tenure aside, population proportions of Black and white Jersey City residents in redlined tracts differ substantially when those tracts are also historically-districted. Black residents account for roughly 13% of the population of redlined census tracts across Jersey City, on average; in redlined but also historically-districted tracts, Black Jersey Citian's numbers drop to 7%, while the proportion of white residents jumps from less than 20% to over 40%.

*Limitations.* As discussed in the literature review on equity implications of municipal historic districting, many exogenous factors correlate with historic districting but are not reflected in this summary analysis. Key among these is Jersey City's parallel record of targeting Black and brown redlined districts farther from the water and from public transportation for densely segregated, densely Black, brown, and low-income public housing projects. At the same time that City Hall designated HOLC-”hazardous” Downtown neighborhoods as historic preservation districts, it designated similarly-redlined tracts as “in need of urban renewal” (clearing a path for the

city to displace Black residents via eminent domain). As suggested by Christopher Silver and other scholars above, then, the City appears to have employed historic districting as part of a two-pronged, post-HOLC method designed to finish what redlining began: eliminating non-white residents from some blocks via exclusionary historic zoning, and others via demolition. By 1984, when all of Downtown's historic districts had been designated, the United States Commission on Civil Rights reported to Washington, D.C. that "due to revitalization occurring in downtown neighborhoods, other areas in Jersey City have received an influx of displacement causing overcrowding and under-maintenance ... the housing market is tight in this city, and most potential displacees desire to remain".<sup>24</sup> For the disproportionate equity implications of historic districting policy on people in previously redlined districts to become clear enough to inform future policy, far more rigorous causal inference models would need to include spatial indicators for Jersey City's redevelopment plans, segregated public housing construction (and subsequently extensive demolition and resident displacement). More importantly, any such models would need to function as secondary support to qualitative, grassroots-up participatory action research from multiple generations of people with knowledge of complex patterns underneath these dataset's static digital variables.

### *Conclusion*

Just as policymakers were responsible for the profoundly long-lasting damages of redlining touched on above, we're responsible now for recognizing which legislation, urban planning, and governance decisions make those damages worse. To pursue local-level housing and community resource allocation policies that are truly restorative against redlining, City Hall should carefully examine how its historic districting zoning overlaps with redlining districts, and work to offset the inequity that this analysis initially suggests may be catalyzed when a historically redlined neighborhood turns into a historic district. Examples of such measures suggested by established scholars and activists include pivoting the City's historic preservation resources to specifically Black Jersey City history (particularly that identified in oral communal tradition); budgeting additional preservation and zoning resources to bolstering Black-owned small businesses in current and future historic districts that intersect redlined areas; and dedicating within-district land specifically to long-term housing for potentially-displaced current residents *before* historic redistricting takes place.<sup>25</sup> But as those sources emphasize, — and this project begins to suggest — redlining's long-term impacts can have highly localized, regionalized variance, and further study of those impacts are urgently necessary as Jersey City continues rapid neighborhood change.

### *Endnotes*

1. U.S. Census Bureau, 2021. Table B25003: "Tenure".
2. Stirling, 2016.
3. U.S. Census Bureau, 2021. Table S1903: Median household income (universe: all occupied units).

4. Wahlers & Saccenti, 2021.
5. Jackson, 1985, p. 202.
6. Kerner Commission, 1968, p. 338.
7. Chen, 2022 (with the usual mixture of levity and bafflement the Gray Lady reserves for her neighbors across the Hudson River.)
8. U.S. Census Bureau, 2021. Table DP04: “Selected Housing Characteristics”.
9. Jersey City Housing Authority, 2023, p. 117.
10. Krauth, 2023.
11. Nelson, 2022.
12. Perry & Harshbarger, 2019.
13. Gerken et al., 2023
14. Xia & Torounian, 2021.
15. Mitchell & Franco, 2018, p. 4.
16. Perry & Harshbarger, 2019.
17. Krieger et. al., 2020.
18. Nardone, 2020.
19. New Jersey Historic Trust & Rutgers University Center for Urban Policy Research, 1997.
20. Silver, 1997, p. 35.
21. NYU Furman Center, 2016, p. 9.
22. Gould Ellen & McCabe, 2016, p. 135.
23. Glaeser, 2010.
24. United States Commission on Civil Rights, 1984, p. 198.
25. *Preserving African American places: Growing preservation's potential as a path for equity*, 2020, pp. 97-98.

## References

- Been, V., Gould Ellen, I., Gedal, M., Edward Glaeser, & McCabe, B. (2016, March). Preserving history or restricting development? The heterogenous effects of historic districts on local housing markets in New York City. *Journal of Urban Economics*, 92, 16-30. <https://doi.org/10.1016/j.jue.2015.12.002>
- Bureau of Labor Statistics. (n.d.). *CPI Inflation Calculator*. BLS.gov. Retrieved March 22, 2023, from <https://data.bls.gov/cgi-bin/cpicalc.pl>
- Chen, S. (2022, July 28). Which City Is Most Expensive for Renters? You Might Be Surprised. *The New York Times*. <https://www.nytimes.com/2022/07/28/realestate/which-city-is-most-expensive-for-renters-you-might-be-surprised.html>

- Faber, J. (2020, August 21). We built this: Consequences of New Deal era intervention in America's racial geography. *American Sociological Review*, 85(5). Sage Journals.  
<https://doi.org/10.1177/0003122420948464>
- Geolytics Neighborhood Change Database (NCDB)* [online demographic data]. (n.d.). GeoLytics, Inc.
- Gerken, M., Batko, S., Fallon, K., Fernandez, E., Williams, A., & Chen, B. (2023, January). *Assessing the legacies of historical redlining*. Urban.org.  
<https://www.urban.org/sites/default/files/2023-01/Addressing%20the%20Legacies%20of%20Historical%20Redlining.pdf>
- Glaeser, E. L. (2010, Spring). Preservation Follies: Excessive landmarking threatens to make Manhattan a refuge for the rich. *City Journal*. <https://www.city-journal.org/html/preservation-follies-13279.html>
- Gould Ellen, I., & McCabe, B. J. (2016, Spring). Does preservation accelerate neighborhood change? *Journal of the American Planning Association*, 82(2), 134-146. DOI 10.1080/01944363.2015.1126195
- Jackson, K. (1985). *Crabgrass frontier: The suburbanization of the United States*. Oxford University Press.
- Jersey City Housing Authority. (2023, March). *Draft 2023 Annual Plan*. JerseyCityHA.org.  
[https://www.jerseycityha.org/\\_files/ugd/e9e5c0\\_6570c14c100e4b2082684143b2395105.pdf](https://www.jerseycityha.org/_files/ugd/e9e5c0_6570c14c100e4b2082684143b2395105.pdf)
- Kerner Commission. (1968). *Report of the National Advisory Commission on Civil Disorders*. Washington, D.C.: Government Printing Office.  
[https://www.hud.gov/sites/dfiles/FHEO/documents/kerner\\_commission\\_full\\_report.pdf](https://www.hud.gov/sites/dfiles/FHEO/documents/kerner_commission_full_report.pdf)
- Krauth, D. (2023, February 16). Eviction 'floodgate' has opened in NYC due to rising rents, end of pandemic era rental aid. *ABC7 New York*. <https://abc7ny.com/housing-crisis-evictions-affordable-rent/12820437/>
- Krieger, N. (2020, July). Structural racism, historical redlining, and the risk of preterm birth in New York City, 2013-2017. *American Journal of Public Health*, 110(7), 1046-1053.  
<https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2020.305656>
- Lynch, K. (1960). *The Image of the City*. MIT Press.
- Mitchell, B., & Franco, J. (2018, March 20). *HOLC "Redlining": The persistent structure of segregation and economic inequality* [NCRC research report]. NCRC.org.  
[https://ncrc.org/wp-content/uploads/dlm\\_uploads/2018/02/NCRC-Research-HOLC-10.pdf](https://ncrc.org/wp-content/uploads/dlm_uploads/2018/02/NCRC-Research-HOLC-10.pdf)
- Nardone, A. (2020, January). Associations between historical residential redlining and current age-adjusted rates of emergency department visits due to asthma across eight studies in California: an ecological study. *Lancet Planet Health*, 4(1), 24-31. PubMed. DOI: 10.1016/S2542-5196(19)30241-4.
- Nelson, L. (2022, May 11). Jersey City Passes Resolution Endorsing NJ Reparations Task Force Legislation. *New Jersey Institute for Social Justice*.  
[https://www.njisj.org/jersey\\_city\\_passes\\_resolution\\_endorsing\\_nj\\_reparations\\_task\\_force\\_legislation](https://www.njisj.org/jersey_city_passes_resolution_endorsing_nj_reparations_task_force_legislation)
- New Jersey Historic Trust & Rutgers University Center for Urban Policy Research. (1997, December). *Economic impacts of historic preservation* [Report]. NJ.gov. Retrieved March 22, 2023, from [https://www.nj.gov/dca/njht/documents/publ/ec\\_imp.pdf](https://www.nj.gov/dca/njht/documents/publ/ec_imp.pdf)
- NYU Furman Center. (2016, March). *Fifty Years of Historic Preservation in New York City* [Fact Brief]. FurmanCenter.org.  
[https://furmancenter.org/files/NYUFurmanCenter\\_HistoricDistrictsBrief\\_7MAR2016.pdf](https://furmancenter.org/files/NYUFurmanCenter_HistoricDistrictsBrief_7MAR2016.pdf)

- Perry, A. M., & Harshbarger, D. (2019, October 14). *America's formerly redlined neighborhoods have changed, and so must solutions to rectify them*. Brookings. Retrieved March 30, 2023, from <https://www.brookings.edu/research/americas-formerly-redlines-areas-changed-so-must-solutions/>
- Preserving African American places: Growing preservation's potential as a path for equity [Report of the African American Cultural Heritage Action Fund/National Trust for Historic Preservation]. (2020, October). <https://savingplaces.org/equity-report>
- Silver, C. (1997). The racial origins of zoning in American cities. In *Urban Planning and the African American Community: In the Shadows*. (pp. 23-42). Sage Publications.
- Stirling, S. (2016, June 27). Segregated N.J. *NJ.com*. [https://www.nj.com/news/2016/06/segregated\\_nj\\_a\\_look\\_at\\_how\\_race\\_still\\_divides\\_us.html](https://www.nj.com/news/2016/06/segregated_nj_a_look_at_how_race_still_divides_us.html)
- Summer, R. (2021, March 23). Comparing mid-century historic preservation and urban renewal through Washington, D.C.'s alley dwellings. *Journal of Planning History*, 21(2). <https://journals.sagepub.com/doi/10.1177/1538513221997797>
- United States Commission on Civil Rights. (1984). *A sheltered crisis: The state of fair housing in the eighties*. Presentations at a consultation sponsored by the US Commission on Civil Rights. <https://www2.law.umaryland.edu/marshall/usccr/documents/cr12f133.pdf>
- U.S. Census Bureau. (2021). *QuickFacts: Jersey City, New Jersey; New York City, New York; San Francisco, California*. Census.gov. Retrieved March 26, 2023, from <https://www.census.gov/quickfacts/fact/table/miamicityflorida,sanfranciscocitycalifornia,newyorkcitynewyork,jerseycitycitynewjersey,US/PST045222>
- Wahlers, R., & Saccenti, J. (2021, January 29). How N.J.'s Gold Coast offers urban living at its finest. *Jersey's Best*. <https://www.jerseysbest.com/home/how-n-j-s-gold-coast-offers-urban-living-at-its-finest/>
- Ward, B. (2023, February 28). DC's historic districts may be preserving racial segregation. *Greater Washington*. <https://ggwash.org/view/88667/are-dcs-historic-districts-preserving-racial-segregation>
- Wells, J. C. (2021, May 12). *10 ways historic preservation supports white supremacy and 10 ideas to end it* [Pre-print working paper]. University of Maryland, College Park, MD. <https://drum.lib.umd.edu/bitstream/handle/1903/27030/10%20Ways%20Historic%20Preservation%20Policy%20Supports%20White%20Supremacy%20%2812%20May%202021%29.pdf?sequence=3&isAllowed=y>
- Xia, G., & Torounian, A. (2021, March 25). The effects of redlining on urban displacement. *The Aragon Outlook*. <https://aronoutlook.org/2021/03/the-effects-of-redlining-on-urban-displacement/>

## *Appendix A: Data Methodology*

Future iterations of this work would be better served by a difference-in-difference panel regression model to better isolate and evaluate the 1977-1982 kink point at which Jersey City designated all of its Waterfront redlined area as historic districts. For now, this project calculated the area intersection (normalized to the NJ State Plane coordinate reference system [NAD83], which calculates length in feet and thus area in square feet) of *Mapping Inequality*'s shapefile as a percentage of each 2020 census tract's total area. Many tracts contained area overlap from different HOLC-graded sections (see figure below); for summary purposes, tracts whose percentage of C or D area were assigned the indicator variable "redlined". The attached R Markdown file, replicable with public data, also retains HOLC-grade-area percentage variables within each tract record. Tracts were then assigned a similar overlap percentage for area their polygons intersected with those of locally-designated historic districts; since some of these overlapped and extended one another over time, I opted to designate "historic" all tracts overlapped to any degree by locally-zoned historic districts. R's *tidycensus* package allowed direct access to the 5-year ACS estimates for each 2020 and 2010 census tract from within the R console, saving the time and effort of loading an NHGIS cart into and out of and back into QGIS. Such effort would and will be necessary for a complete longitudinal analysis of Jersey City's redlined census tracts all the way back to 1940, since as discussed in this class, the U.S. Census' geographic boundary collection levels and variable measurements — particularly for measures of race — varied enormously between the 1940-1970 decennial census. For 1970-2010, however, the NYU digital library collections offer free access to Geolytics' "Neighborhood Change Database", which normalizes decennial census summary files to 2010 TIGER/Line census-tract boundaries; I opted to use this dataset for scope and time constraint reasons, and imputed ACS 5-year estimates for 2020 data since the decennial estimates have not as of this writing been released. Don't do as I do! — the sets are highly noncomparable, but spark further curiosity for when the 2020 decennial comes out later this spring.

See summary tables for a further selection of variable explored for this analysis.

*Appendix B: Tables & Figures*

**Table 1.**

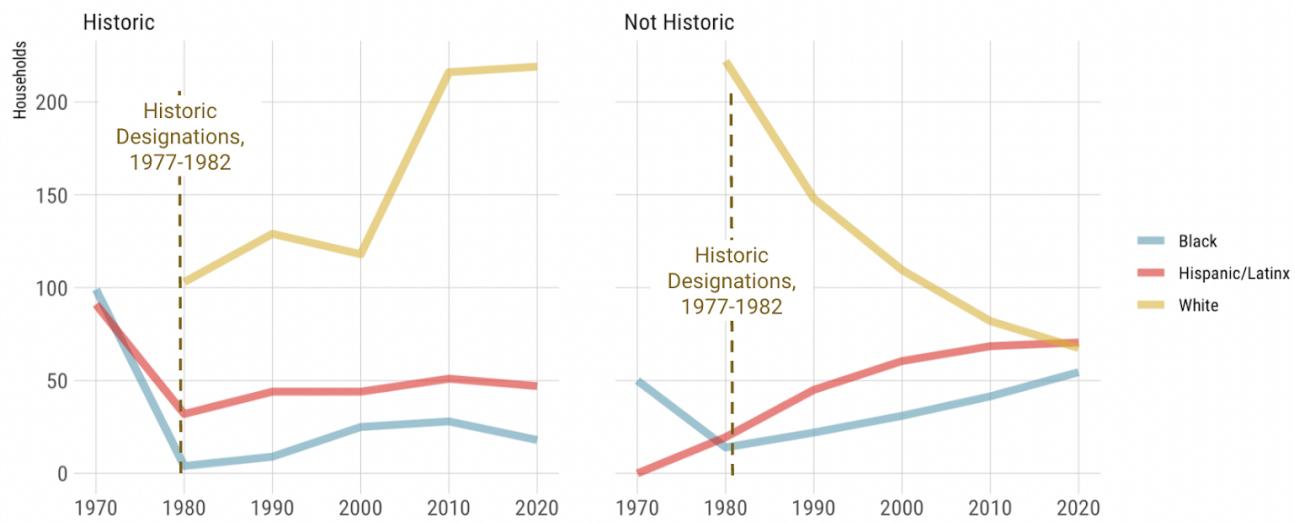
	Not Redlined	Redlined
n_tracts	26	51
hh_inc	99743.22	85059.17
pct_bl	7.30	12.88
pct_wh	25.58	19.11
pct_hplx	24.45	29.08
own	413	411
rent	971.5	903.0
pct_own	0.28	0.30
pct_rent	0.72	0.70
wh_own	115.5	85.0
bl_own	19.5	31.0
hplx_own	29	60
wh_rent	213	182

**Table 2.****Characteristics of Jersey City census tracts in 2020, by redlining and historic district status**

	Not Redlined (N = 26)		Redlined (N = 51)	
	Historic	Not Historic	Historic	Not Historic
n_tracts	2	24	11	40
hh_inc	120577.12	98595.90	155994.72	79767.51
pct_bl	36.21	5.63	6.86	16.11
pct_wh	24.48	25.58	40.82	15.72
pct_hplx	29.14	21.16	21.78	31.15
own	405.0	422.5	435.0	390.5
rent	686.0	971.5	722.0	931.5
pct_own	0.42	0.26	0.32	0.29
pct_rent	0.58	0.74	0.68	0.71
wh_own	201.5	107.5	219.0	67.5
bl_own	82.5	14.5	18.0	54.5
hplx_own	62.0	29.0	47.0	70.5
wh_rent	180.0	213.0	329.0	114.5
bl_rent	233.5	127.0	85.0	200.5
hplx_rent	225	159	233	265

## Redlined Households by Tenure, Race, & Historic Designation Status: Homeowners

Average household count across all Jersey City census tracts graded 'C' or 'D' in 1939.

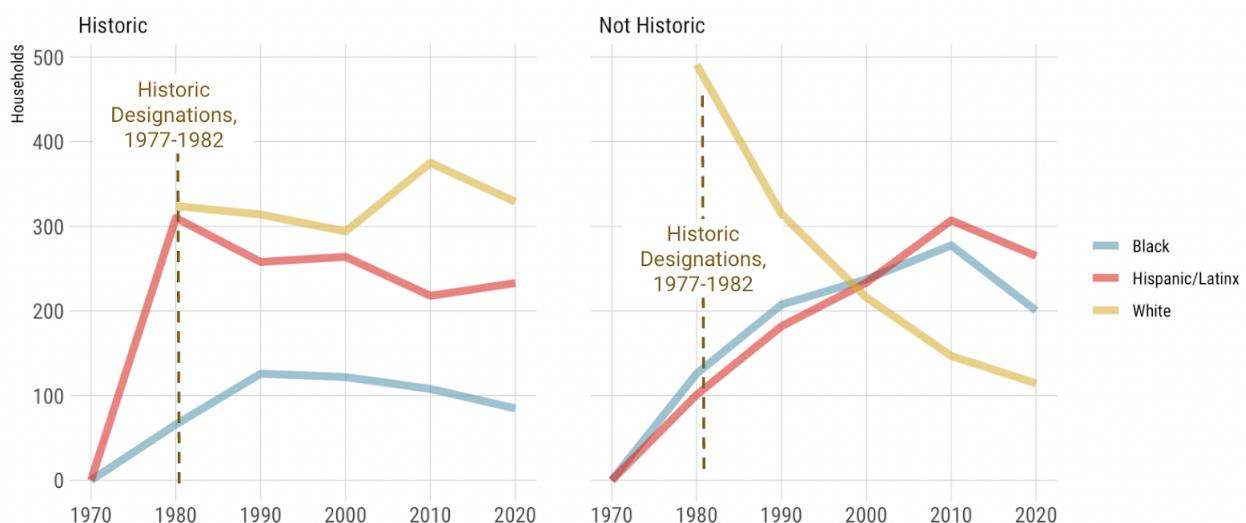


Source: 2020 ACS 5-yr estimates; 1970-2010 U.S. Census decennial estimates fitted to 2010 census boundaries by Neighborhood Change Database; tract-level HOLC grades digitized by University of Richmond; Jersey City historic district boundaries via data.jerseycitynj.gov.

\* Missing data in Geolytics' 2010 alone 1970 decennial tenure estimates prevent plotting pre-1980 white tenure proportions.

## Redlined Households by Tenure, Race, & Historic Designation Status: Renters

Average household count across all Jersey City census tracts graded 'C' or 'D' in 1939.



Source: 2020 ACS 5-yr estimates; 1970-2010 U.S. Census decennial estimates fitted to 2010 census boundaries by Neighborhood Change Database; tract-level HOLC grades digitized by University of Richmond; Jersey City historic district boundaries via data.jerseycitynj.gov.

\* Missing data in Geolytics' 2010 alone 1970 decennial tenure estimates prevent plotting pre-1980 white tenure proportions.

*Appendix C: R Markdown*

*[Attached separately as .html file]*