Does Preservation Accelerate Neighborhood Change?

Examining the Impact of Historic Preservation in New York City

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Problem, research strategy, and findings: A number of studies have examined the property value impacts of historic preservation, but few have considered how preservation shapes neighborhood composition. In this study, we ask whether the designation of historic districts contributes to changes in the racial composition and socioeconomic status of New York City neighborhoods. Bringing together data on historic districts with a panel of census tracts, we study how neighborhoods change after the designation of a historic district. We find little evidence of changes in the racial composition of a neighborhood, but report a significant increase in socioeconomic status following historic designation.

Takeaway for practice: Our research offers empirical evidence on changes in the racial composition and socioeconomic status of neighborhoods following the designation of a historic district. It suggests that historic preservation can contribute to economic revitalization in urban neighborhoods, but that these changes risk making neighborhoods less accessible to lower-income residents. Planners should consider ways that the city government can work to preserve the highly valued amenities of historic neighborhoods while mitigating the potential for residential displacement.

Keywords: historic preservation, neighborhood change, gentrification

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I n 1965, the New York City Landmarks Preservation Commission (LPC) designated Brooklyn Heights as the city's first historic district. Today, five decades after the designation, it is one of New York City's wealthiest neighborhoods. Like many other neighborhoods that are designated as historic districts, Brooklyn Heights houses higher-income, more educated residents than the surrounding communities. In general, across the city, the population of New Yorkers living in historic districts differs starkly from the population living outside of them.[1]

In this study, we investigate the roots of these differences. Specifically, we study whether neighborhoods designated as historic districts were already more prosperous (or on their way to becoming more prosperous) than other neighborhoods before designation, or whether historic designation itself contributed to their relative prosperity. Drawing on an analysis of census tracts in New York City—a city with a long history of historic preservation (Allison, 1996; Wood, 2007)—we focus on three types of neighborhood changes. First, we examine whether the socioeconomic status of a census tract rises relative to other neighborhoods following the designation of a historic district. We use the household income, poverty rate, and share of residents with college degrees to capture socioeconomic status. Next, we investigate whether historic designation contributes to changes in the racial composition of a census tract. Finally, we examine changes in housing market characteristics to understand the mechanisms behind any population changes. Specifically, we ask whether rents rise or the homeownership rate increases relative to that of other neighborhoods after the designation of a historic district.

From our comparison of the changes that occur after designation in census tracts that become historic districts with nearby census tracts that do not, we find consistent evidence that the relative socioeconomic status of neighborhoods improves following designation. On average, after a district is designated, the share of college-educated residents and the mean household income rise, and the poverty rate falls relative to surrounding census tracts. We also find a post-designation increase in homeownership rates. However, we find no change in reported rents and little evidence of racial turnover in neighborhoods after the designation of a historic district. In sum, historic preservation in New York City appears to accelerate some of the changes associated with gentrification and neighborhood revitalization, but not others.

We organize our article in five parts. In the next section, we briefly describe the process of historic designation in New York City. Then, we review existing research on the way historic preservation affects cities and communities, and lay out our expectations about changes in a community following the designation of a historic district. In the third section, we present the data and methods used to identify the types of changes taking place in historic neighborhoods. We then describe our findings in the next section. We conclude by arguing that planners and policymakers should consider the unintended neighborhood changes that result from policies designed to protect historic neighborhoods. We suggest that planners identify strategies to maintain neighborhood diversity and mitigate residential displacement after neighborhoods are designated as historic districts.

The Preservation of Historic Neighborhoods in New York City

New York City has a long history of historic preservation, dating back to the early 1960s when the construction of the Brooklyn–Queens Expressway posed an imminent threat to the Brooklyn Heights neighborhood, a historic community of stately 19th-century brownstones. Along with the demolition of the Beaux Arts Penn Station in Manhattan, this threat galvanized city residents behind preservation policies, leading to the creation of the Landmarks Preservation Commission (LPC) in 1965 (Gratz 2011; Wood 2007). The LPC was empowered to designate both individual properties as historic landmarks as well as entire neighborhoods as historic districts. Our focus is on the creation of these districts, beginning with the designation of the Brooklyn Heights historic district.

One of the primary rationales for allowing the designation of historic districts was that such designations could help stabilize declining neighborhoods.[2] By the 1960s, many

communities in New York City had experienced dramatic population declines. While preservationists sought to preserve historic assets, the preamble to the landmarks preservation law also identified historic preservation as a tool to spur neighborhood upgrading, attract additional residents, and stabilize property values, a goal with a very different connotation in the context of contemporary concerns about gentrification.

Between 1965 and 2009—the final year of our data—the LPC designated exactly 100 historic districts and approved 13 extensions to the original boundaries of historic districts. The pace of these designations was relatively consistent across decades, although there was a slight uptick in the last decade of our data. Notably, these historic districts cover a substantial portion of the parcels in New York City. By 2009, about 5% of residential units citywide—and 12% of those in Manhattan—were located within a designated historic district (Been et al., 2011).

The process of designating a historic district brings together both community actors and city agencies. Typically, the first step in the designation process involves the submission of a request for evaluation (RFE) to the LPC. These evaluations are generally supported with extensive material from civic organizations and community groups. To move forward with the designation, the LPC votes to "calendar" a proposed historic district. The Commission then holds a public hearing to allow property owners and other interested parties to offer their opinions on the district. A majority of commissioners on the LPC must then approve the district, and final approval is required by the City Council (New York City Landmarks Preservation Commission, 2015a).

The city government changes the street signs from green to brown following the designation of a historic district. These public markers help demarcate the boundaries of historic districts in New York City. In addition, the city imposes a series of restrictions on construction and renovation activity within the district that may affect the attractiveness of the neighborhood to various groups. Property owners who want to undertake construction work must receive approval from the Department of Buildings and the LPC before beginning construction. While this approval process ensures the continuity of historic amenities in the neighborhood, it may also make it more burdensome for property owners to upgrade and maintain their buildings (New York City LPC, 2015b). For renovations or maintenance on existing buildings, the LPC considers whether the changes would affect external architectural features of the building. In the case of new construction, the Commission considers whether the proposed building harmonizes with the existing buildings in the district (Been, Ellen, Gedal, Glaeser, & McCabe, in press).[3]

Preservation, Gentrification, and Neighborhood Change

By focusing on the population changes that occur after the designation of a historic district, our study contributes to a body of research that examines the consequences of historic preservation for neighborhoods and cities. Over the last few decades, much of this research has evaluated the role of preservation policies in the economic development of a city as a whole (Gilderbloom, Hanka, & Ambrosius, 2009; Ilja, Ryberg, Rosentraub, & Bowen, 2011; Listokin, Listokin, & Lahr, 1998; Mason, 2005; Ryberg-Webster & Kinahan, 2014; Sohmer & Lang, 1998; Wojno 1991). This research often draws on comparative case studies from American cities to demonstrate the economic benefits of preservation. For example, in a study of 10 cities across the country, Ryberg-Webster (2014) shows that the federal rehabilitation tax credit for properties on the National Register of Historic Places contributes to the economic redevelopment of downtowns. She contends that these federal tax credits have helped to create mixed-use office buildings and new housing units, contributing to the economic revitalization of downtown America.

One way that the preservation of historic neighborhoods can further economic development is through the promotion of tourism, one of the stated aims of the law establishing the LPC in New York City.[4] Visitors may flock to the most iconic neighborhoods in a city, and the preservation of culturally or aesthetically important neighborhoods can help rebrand the image of the city (Dinnie 2011; Gotham 2007; Greenberg 2009). Yet, in a case study of New Orleans, Gotham (2005) warns about "tourism gentrification," or the transformation of once-middle-class urban neighborhoods into commercial attractions for tourists. In concerns prescient to our own study, he notes that this transformation raises the specter of displacement as well as the possibility that promoting tourism through the preservation of historic neighborhoods will harm local residents.

While many studies linking preservation to economic development examine the citywide impact of these policies, our interest lies in understanding the impact of historic designation on the trajectory of individual neighborhoods. Although some prior studies aim to shed light on how historic designation affects individual neighborhoods, rather than the city as a whole, these studies tend to focus on property values (Asabere, Huffman, & Mehdian, 1994; Coulson & Lahr, 2005; Coulson & Leichenko, 2001; Leichenko, Coulson, & Listokin, 2001; Noonan & Krupka, 2011; Zahirovic-Herbert & Gibler, 2012). Many report that residential property values are higher inside historic districts than outside of them. However, they often rely on cross-sectional comparisons that make it impossible to control for preexisting price differences between properties inside and outside historic districts. Studies using longitudinal data to evaluate prices before and after designation report more mixed results (Heintzelman & Altieri, 2011; Noonan & Krupka, 2011).

In a recent analysis using longitudinal data in New York City, Been et al. (in press) find that the designation of historic districts increases the value of properties within districts, at least in relatively lower-density and lower-valued neighborhoods outside of Manhattan, where owners give up less-valuable development rights. Been et al. also report positive spillover effects on the blocks immediately surrounding the historic district, suggesting that homes located right outside a historic district sell for a premium following the designation of a district.

This burgeoning research on the property value impacts of preservation are important to our research because they offer clues about how the demographic composition of neighborhoods is likely to change following the designation of a historic district. If property values increase after the designation of a neighborhood, then historic neighborhoods may become too expensive for low-income buyers. Likewise, if rents rise along with property values, then low-income renters may be less likely to enter neighborhoods designated as historic districts, and those that are already there may find it more difficult to stay.

Even absent a large increase in property values or rents, the designation of a historic district could attract more educated and high-income residents by signaling the presence—and preservation—of historic amenities that they value. The benefits of living in these communities may be largely symbolic, with a certain cultural resonance akin to living in "trendy" neighborhoods (e.g., SoHo).

Finally, these studies hint at the possibility that historic district designation restricts the supply of housing, decreasing the availability of affordable rental housing for low- and moderate-income households. In many cities, including New York City, the designation of historic districts places restrictions on demolition and new construction, and may make it particularly difficult to build new multifamily housing. Further, the protections against changes to the built environment that historic districts provide may attract homeowners, who likely value such certainty more than renters. In response, property owners may convert two- to four-family rental buildings into single-family homes. Such conversions naturally reduce the supply of rental housing and may specifically reduce the supply of low-rent units, as owners of apartments in small buildings tend to charge lower rents (Furman Center for Real Estate and Urban Policy, 2013).

Despite these theoretical reasons to expect an increase in socioeconomic status following the designation of historic districts, there is remarkably little research examining patterns

of demographic or racial change following such designations. In a case study of Fort Worth (TX), Coulson and Leichenko (2004) investigate whether the designation of individual historic properties (not districts) results in socioeconomic changes in Fort Worth neighborhoods.[5] They include both a dichotomous indicator identifying whether any of the properties in a census tract are designated as historic and a count measure identifying the number of such properties in a census tract. After noting that neighborhoods with historic property designations are, on average, slightly worse off than other neighborhoods in the city, they find no evidence that the designation of historic properties affects the homeownership rate, the median income, or the ethnic composition of the population in these neighborhoods. But again, they study the designation of individual landmarks, not historic districts.

Even absent substantial empirical evidence on shifts in neighborhood composition, critics have expressed concerns that preservation policies are likely to hasten residential turnover, or to make housing unaffordable for neighborhood residents (Smith 1998; Werwath, 1998). In their evaluation of the APA's Great Neighborhoods program, Talen, Menozzi, and Schaefer (2015) underscore the challenges of maintaining affordability and promoting social inclusion in historic communities. Talen et al. (2015) report that the historic neighborhoods in the Great Neighborhoods program are often less inclusive and more expensive than the surrounding communities. To the extent that preservation leads to residential turnover in neighborhoods, or makes housing less affordable for neighborhood residents, these land use policies may exacerbate concerns about gentrification, especially in high-priced cities like New York. Indeed, some have explicitly cautioned that the preservation of historic neighborhoods may displace low-income residents as housing values rise (Smith, 1998).

While these mechanisms—the higher price of housing, the increased social status of neighborhoods, and the reduction in the number of affordable rental units—are plausible mechanisms to explain increases in neighborhood income and education levels following the designation of a historic district, it is possible that the causality runs in the opposite direction. For example, it is possible that after new, higher-income homeowners move to a neighborhood, they may begin to advocate for public policies, including zoning changes or historic district designation, as a protection against changes that could undermine their housing investments (Been, Madar, & McDonnell, 2014; McCabe, 2013, 2016).

Similarly, newcomers to neighborhoods may bring with them stronger political networks or greater social capital to start the preservation process. When college-educated, high-income residents move into a neighborhood, they may bring a better knowledge of the planning process or the levers of city governance. They may be more likely to advocate for historic preservation, recognizing the financial or social benefits associated with living in designated neighborhoods; and if they are more politically active than previous residents, or have stronger social connections, they may be more successful in securing a historic district designation.[6]

Assessing the Impact of Historic Designation

To assess the impact of historic district designations on changes in the characteristics of New York City neighborhoods, we bring together data from the U.S. Census Bureau, the New York City Department of City Planning, and the Landmarks Preservation Commission.

Data on Neighborhoods and Historic Preservation

Consistent with previous research, we use census tracts to identify neighborhoods. We rely on data from the decennial census and the American Community Survey to describe the socioeconomic status, racial composition and housing characteristics of New York City's census tracts.

A key challenge in studying neighborhood change is that the boundaries of census tracts change over time. To address this issue, we use the Neighborhood Change Database (NCDB), a tract-level dataset developed by Geolytics and the Urban Institute. For all metropolitan areas in the country, the NCDB uses underlying census block data to provide demographic and housing data for 1970, 1980, 1990, 2000, and 2010 for fixed-boundary census tracts, using the tract boundaries defined in 2010.[7]

We restrict our sample to census tracts that are located within the 32 community districts in the city that have at least one tax lot (or parcel) in a historic district by 2010. We also restrict our sample to census tracts with more than 100 residents in each of our census years. This leaves us with 1,001 census tracts in 32 community districts.[8] With just a few exceptions, each of these tracts is observed five times (1970, 1980, 1990, 2000, and 2010), producing a nearly balanced panel with 4,998 tract-year observations.[9]

Because the boundaries of historic districts do not follow census geographies, we rely on the primary land use tax lot output (PLUTO) data from the Department of City Planning to identify the penetration of historic districts into a neighborhood. The PLUTO data set includes one record for each tax lot, or parcel, in New York City. It includes an indicator identifying whether the lot is located within a historic district, and if so, it indicates the name of the historic district. By linking these records to administrative data from
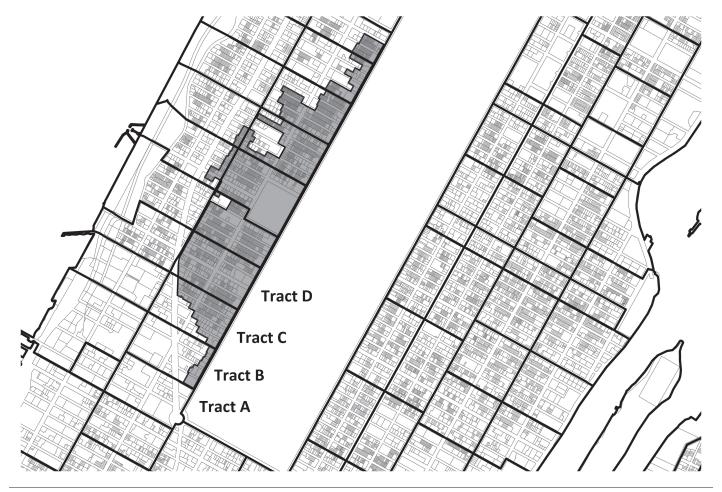
Figure 1. Historic district and census tract map of the Upper West Side, New York City.

the LPC identifying the designation date for each historic district, we can then identify the share of tax lots in each census tract located within a historic district in a particular year. For each tract, we can also identify the share of lots that will be located within a historic district by 2010.

In Figure 1, we illustrate our strategy of identifying the share of parcels in historic districts using a map of the Upper West Side/Central Park historic district. The area shaded in gray is the historic district overlaid atop individual parcels in the neighborhood. The areas bounded by the bolded black lines are census tracts. The large, rectangular white portion of the figure is Central Park. The map highlights the non-contiguous geography of census tracts and historic districts to show that district boundaries sometimes cut across census tracts, leaving tracts partially included in the historic district.

Using this information, we assign each census tract in each decade to one of the following four mutually exclusive categories depending on the share of parcels within a historic district: 0% in a historic district; 1% to 24% in a historic district; 25% to 75% in a historic district; and more than 75% in a historic district. In Figure 1, for example, tract D is categorized as having more than 75% of parcels located

in a historic district, tract C falls in the group of tracts with between 25% and 75% of parcels located in a district, and tract B falls in the group with at least one but fewer than 25% of parcels in a district. None of the parcels in tract A is located in a historic district.

In 2010, 814 of our sample census tracts (81%) had no parcels in a historic district. In 71 tracts (7%) at least one parcel but fewer than 25% of parcels were in a historic district, and in 83 tracts (8%), between 25% and 75% of parcels were in a historic district. In the remaining 33 tracts (3%), more than 75% of parcels were part of a historic district.

In our analysis, we consider two key aspects of the residential composition of a neighborhood: socioeconomic status and racial composition. We use three variables to capture the socioeconomic status of a neighborhood: the poverty rate, the log of mean household income, and the percentage of residents with college degrees. We use two measures to depict the racial composition of a neighborhood: the percentage of tract residents who are non-Hispanic White (which we label as percentage White) and the percentage who are Black.

To shed light on the mechanisms of neighborhood change, we also examine changes in local housing conditions, looking

Table 1. Characteristics of tracts in 1970 by historic district status.

	Census tracts with no parcels in historic districts ($N = 814$) by 2010		Census tracts with > 75% of parcels in historic districts ($N = 33$) by 2010	
	M	SD	M	SD
Proportion Black	0.217	0.298	0.113	0.166
Proportion White	0.764	0.298	0.865	0.171
Proportion poverty	0.153	0.117	0.126	0.077
Proportion college degree	0.095	0.105	0.305	0.123
Proportion owner occupied	0.404	0.342	0.167	0.197
Mean household income	$56,118	$26,497	$79,401	$41,304

at both the neighborhood homeownership rate and the log of median rent. While the homeownership rate straightforwardly captures the share of households living in owner-occupied housing, the rent variable reported by the U.S. Census has substantial limitations. It captures only self-reported rents, and therefore may be measured with error. It also reports rents without adjusting for the quality and composition of the rental housing stock in a neighborhood. Moreover, it is reported back only to 1980, creating a more limited time series for our analysis. Still, taken together, these eight outcomes shed considerable light on the link between historic designations and the characteristics of New York City neighborhoods.

Table 1 compares the initial (1970) characteristics of census tracts that would not have any properties located in a historic district in 2010 with the characteristics of tracts in which at least 75% of properties would be included in a historic district in 2010.

The tracts that would, over the course of the next four decades, have parcels included in a designated historic district differed systematically from those that would not. On average, the tracts that would be included in historic districts had larger proportions of both White residents and college-educated residents in 1970 compared with those that would not become part of historic districts. They also had higher incomes and lower poverty rates. Perhaps surprisingly, the tracts that would become part of historic districts had lower rates of homeownership in 1970 than the tracts that would never be part of a district.

Methods of Analysis

The central goal of our research is to identify how the socioeconomic status, racial composition, and housing characteristics of a neighborhood change following the designation of a historic district. Identifying whether these changes are actually the result of designation is challenging because the neighborhoods designated as historic districts are likely to differ from other neighborhoods in the city in ways we cannot measure. These unobserved attributes, such

as unique architectural features, might make a neighborhood more expensive or attractive to higher-status residents, even absent designation. Through a difference-in-difference approach, which we describe below, we are able to account for these unmeasured differences between neighborhoods. The Technical Appendix offers additional details on each of our regression models.

The basic intuition of the difference-in-difference model is to control for the initial differences between tracts—in this case, those that would be designated as historic districts and those that would not—and then to evaluate whether those differences grow or shrink after designation. In the first models, reported in column 1 of the tables in the following section, the variable *HDEver* captures baseline difference between neighborhoods that will become historic districts, and those that will not. The variable *HDPost* identifies how the neighborhoods that comprise historic districts change relative to surrounding areas after their designation.

In the second set of models, reported in column 2, we estimate our regression with census tract fixed effects to more fully control for baseline differences between census tracts with parcels in historic districts and those without such parcels.[10] This specification allows us to more precisely estimate how tracts with parcels in historic districts change after designation relative to nearby tracts that are located in the same community district but do not experience a designation.

In the third model, reported in column 3, we control for the possibility that prior demographic trends in census tracts that later become part of historic districts differ from trends in other tracts in the same community district. Specifically, we include a counter variable, *HDTrend*, which identifies the number of years before or after designation that we observe the tract for those tracts that become part of historic districts.

In this model, we also include a set of *TPost* variables to allow the impact of designation to evolve over time. Specifically, this variable identifies the number of years after designation that we observe a tract and captures the difference between the actual changes that took place after designation

and the changes that would have occurred regardless of designation (assuming that the composition of a tract continued to change at the same rate it was changing prior to designation).

Finally, after estimating our models for the full universe of tracts in New York City, we then reestimate them for the set of tracts outside of Manhattan: the 716 census tracts in our sample in the boroughs of Queens, Brooklyn, the Bronx, and Staten Island. These boroughs have an average population density that is one-third the density of Manhattan, and many more of their neighborhoods are composed of one- to four-unit buildings, making them more comparable to other urban neighborhoods nationwide. Thus, results from regressions on this outer-borough sample may be more generalizable to other cities. To conserve space, we report only results from census tract fixed effects models for the outer-borough sample.

Neighborhood Change After the Designation of a Historic District

The analysis below summarizes our findings about how the socioeconomic status, racial composition, and housing market conditions of a neighborhood change after the designation of a historic district.

Socioeconomic Status

In Tables 2, 3, and 4, we show the results from regression analysis of neighborhood socioeconomic status. In general, we find that the socioeconomic status of a neighborhood increases following historic district designation, and the increases tend to be greater in census tracts that have a greater share of parcels included in historic districts.

For example, the first column of Table 2 shows that in census tracts in which between 25% and 75% of parcels are designated as part of a historic district, household income increases by approximately 14% following designation relative to census tracts in the same community district without historic districts. The results are very similar in column 2, when we estimate models that more tightly control for baseline neighborhood characteristics through census tract fixed effects.

As noted, the third model accounts for preexisting trends and allows the impact of historic designation to change over time. We see an immediate boost of about 6% in the average household income for census tracts in which between 25% and 75% of parcels are designated relative to nearby neighborhoods without any designated parcels (Table 2, column 3). In addition, neighborhood incomes grow steadily in the years after designation—by about 4% to 6% per decade—relative to the surrounding community district.

The findings are similar when we turn to the share of college-educated residents. In tracts in which at least 25% of

Table 2. Regression of mean household income (logged) on historic districts.

	(1)	(2)	(3)	(4)
HDPost: 1%–24%	0.025	0.020	–0.012	–0.004
	(0.037)	(0.025)	(0.028)	(0.033)
HDPost: 25%–75%	0.139***	0.121***	0.057*	0.092***
	(0.041)	(0.027)	(0.032)	(0.032)
HDPost: 76%–100%	0.099	0.100**	0.032	0.156***
	(0.078)	(0.039)	(0.042)	(0.051)
HDEver: 1%–24%	0.084*			
	(0.045)			
HDEver: 25%–75%	0.161***			
	(0.039)			
HDEver: 76%–100%	0.436***			
	(0.076)			
HDTrend			0.000***	
			(0.000)	
TPost: 1%–24%			0.004***	
			(0.001)	
TPost: 25%–75%			0.006***	
			(0.001)	
TPost: 76%–100%			0.006***	
			(0.002)	
Constant	10.901***	11.066***	10.808***	10.990***
	(0.009)	(0.025)	(0.023)	(0.019)
Observations	4,998	4,998	4,998	3,598
Tract FE	no	yes	yes	yes
CD × Decade FE	yes	yes	yes	yes
Adj. R^2	0.712	0.906	0.907	0.891

Notes: Robust standard errors clustered by census tract.
*$p < .1$, **$p < .05$, ***$p < .01$.

parcels are designated as part of a historic district, the percentage of college-educated residents climbs by an average of 5 to 10 percentage points after the designation relative to other nearby neighborhoods (Table 3, columns 1 and 2). When we control for prior trends and allow effects to evolve over time, we find short-term relative increases of three and five percentage points following designation (Table 3, column 3) and further relative increases of about two percentage points per decade.

Finally, we find that the poverty rate declines after a neighborhood is designated. In tracts in which at least a quarter of parcels are in historic districts, the percentage of residents living below the poverty line falls by two to four percentage points following designation relative to the surrounding community district (Table 4, columns 1 and 2). We find less evidence that the relative poverty rate falls further over time.

Table 3. Regression of percentage of college-educated residents in historic districts.

	(1)	(2)	(3)	(4)
HDPost: 1%–24%	0.035**	0.018	0.004	0.023
	(0.016)	(0.011)	(0.013)	(0.016)
HDPost: 25%–75%	0.056***	0.056***	0.033**	0.083***
	(0.017)	(0.012)	(0.014)	(0.017)
HDPost: 76%–100%	0.102***	0.073***	0.051***	0.112***
	(0.024)	(0.016)	–0.017	(0.025)
HDEver: 1%–24%	0.031*			
	(0.016)			
HDEver: 25%–75%	0.063***			
	(0.015)			
HDEver: 76%–100%	0.132***			
	(0.022)			
HDTrend			–0.000***	
			(0.000)	
TPost: 1%–24%			0.001***	
			(0.001)	
TPost: 25%–75%			0.002***	
			(0.001)	
TPost: 76%–100%			0.002***	
			(0.001)	
Constant	0.232***	0.294***	0.363***	0.241***
	(0.004)	(0.009)	(0.014)	(0.009)
Observations	4,998	4,998	4,998	3,598
Tract FE	no	yes	yes	yes
CD × Decade FE	yes	yes	yes	yes
Adj. R^2	0.744	0.899	0.900	0.827

Notes: Robust standard errors clustered by census tract.

$^*p < .1$, $^{**}p < .05$, $^{***}p < .01$.

Table 4. Regression of poverty rate in historic districts.

	(1)	(2)	(3)	(4)
HDPost: 1%–24%	–0.007	–0.000	0.009	–0.010
	(0.010)	(0.008)	(0.009)	(0.011)
HDPost: 25%–75%	–0.028***	–0.023***	–0.022***	–0.026***
	(0.009)	(0.007)	(0.008)	(0.010)
HDPost: 76%–100%	–0.043***	–0.030***	–0.031***	–0.054**
	(0.014)	(0.010)	(0.011)	(0.021)
HDEver: 1%–24%	–0.021**			
	(0.010)			
HDEver: 25%–75%	–0.037***			
	(0.008)			
HDEver: 76%–100%	–0.059***			
	(0.014)			
HDTrend			–0.000***	
			(0.000)	
TPost: 1%–24%			–0.001**	
			(0.000)	
TPost: 25%–75%			–0.000	
			(0.000)	
TPost: 76%–100%			–0.000	
			(0.000)	
Constant	0.211***	0.215***	0.287***	0.230***
	(0.003)	(0.009)	(0.011)	(0.013)
Observations	4,998	4,998	4,998	3,598
Tract FE	no	yes	yes	yes
CD × Decade FE	yes	yes	yes	yes
Adj. R^2	0.632	0.839	0.839	0.849

Notes: Robust standard errors clustered by census tract.

$^*p < .1$, $^{**}p < .05$, $^{***}p < .01$.

Together, these analyses tell a consistent story. Neighborhoods that comprise historic districts in New York City have seen relative increases in socioeconomic status following designation compared with other nearby neighborhoods, either by attracting higher-income and more educated residents, or by pricing out low-income residents.[11]

To address potential concerns that these results are not generalizable beyond New York City, we estimate our models for census tracts outside of Manhattan, which are more comparable to neighborhoods in other cities in the United States. Our results (shown in column 4 of each table) suggest that, if anything, the socioeconomic changes following designation were even greater in lower-density neighborhoods outside of Manhattan. For example, we find that tracts outside of Manhattan that saw the designation of at least 25% of their parcels experienced a boost in average household income of 9% to 16% relative to nearby tracts following designation

(Table 2, column 4) and a relative increase in the share of college-educated residents of between 8 and 11 percentage points (Table 3, column 4).[12]

Racial Composition

In contrast to our consistent findings regarding socioeconomic status, Table 5 shows no evidence of a change in the share of residents who are Black following designation. Across models, none of the coefficients on *HDPost* are statistically significant, which suggests that the share of Black residents does not change relative to that of other nearby neighborhoods following the designation of a historic district.

When we look at the share of White residents, we see evidence of a modest increase relative to other nearby tracts after historic designation. In the model with census tract fixed effects, we find that the percentage of White residents in a census tract grows on average by about three percentage

Table 5. Regression of percentage Black residents in historic districts.

	(1)	(2)	(3)	(4)
HDPost: 1%–24%	0.031	0.012	0.009	0.029
	(0.021)	(0.012)	(0.011)	(0.019)
HDPost: 25%–75%	–0.016	–0.004	0.005	0.003
	(0.025)	(0.010)	(0.011)	(0.016)
HDPost: 76%–100%	–0.017	0.014	0.004	0.059
	(0.040)	(0.022)	(0.022)	(0.055)
HDEver: 1%–24%	–0.013			
	(0.021)			
HDEver: 25%–75%	–0.001			
	(0.026)			
HDEver: 76%–100%	–0.098***			
	(0.036)			
HDTrend			0.000***	
			(0.000)	
TPost: 1%–24%			0.000	
			(0.000)	
TPost: 25%–75%			–0.001	
			(0.000)	
TPost: 76%–100%			0.001	
			(0.000)	
Constant	0.257***	0.273***	0.221***	0.232***
	(0.005)	(0.010)	(0.008)	(0.010)
Observations	4,998	4,998	4,998	3,598
Tract FE	no	yes	yes	yes
CD × Decade FE	yes	yes	yes	yes
Adj. R^2	0.738	0.951	0.951	0.948

Notes: Robust standard errors clustered by census tract.

*p < .1, **p < .05, ***p < .01.

Table 6. Regression of percentage White (non-Hispanic) residents in historic districts.

	(1)	(2)	(3)	(4)
HDPost: 1%–24%	0.004	–0.009	–0.019	–0.037*
	(0.025)	(0.013)	(0.013)	(0.020)
HDPost: 25%–75%	0.042*	0.032***	0.016	0.024
	(0.023)	(0.012)	(0.012)	(0.017)
HDPost: 76%–100%	0.075*	0.030	0.026	0.007
	(0.040)	(0.024)	(0.024)	(0.061)
HDEver: 1%–24%	0.002			
	(0.025)			
HDEver: 25%–75%	0.034			
	(0.026)			
HDEver: 76%–100%	0.133***			
	(0.035)			
HDTrend			0.000	
			(0.000)	
TPost: 1%–24%			0.001**	
			(0.000)	
TPost: 25%–75%			0.001***	
			(0.000)	
TPost: 76%–100%			0.001	
			(0.001)	
Constant	0.564***	0.601***	0.576***	0.639***
	(0.006)	(0.010)	(0.017)	(0.012)
Observations	4,998	4,998	4,998	3,598
Tract FE	no	yes	yes	yes
CD × Decade FE	yes	yes	yes	yes
Adj. R^2	0.731	0.931	0.931	0.923

Notes: Robust standard errors clustered by census tract.

*p < .1, **p < .05, ***p < .01.

points after designation for neighborhoods in which 25% to 75% of parcels are designated as part of historic districts relative to other areas (Table 6, column 2). However, the changes are not statistically significant for tracts with at least 75% of parcels in districts. Further, we find no evidence of an increase in the percentage of White residents in neighborhoods outside of Manhattan. Together, these findings provide very little support for the charge that historic preservation is accelerating racial change in New York City.

Housing Market Characteristics

Finally, we present results for our two housing market variables in Tables 7 and 8. The results for the homeownership rate largely follow those for socioeconomic status in the neighborhood. We see a substantial increase in the homeownership rate after designation in neighborhoods with parcels located in historic districts. Controlling for preexist-

ing differences, we find that the homeownership rate rises, on average, by 12 percentage points after designation relative to surrounding tracts for neighborhoods with at least 25% of parcels in historic districts (Table 7, column 2). When we control for preexisting trends and allow the impact to grow over time, we find evidence of smaller short-term effects, but a substantial increase in the homeownership rate over time. Again, the post-designation homeownership rate increases for tracts with properties in historic districts are similar or larger in neighborhoods outside of Manhattan.

Finally, across models, we find no evidence that rents rise relative to other neighborhoods after the designation of a historic district (Table 8). Instead, it appears that neighborhoods with higher rents are more likely to be designated as historic districts. One explanation for this null finding could be that rents in rent-regulated buildings, which comprise a substantial share of the rental housing

Table 7. Regression of homeownership rate in historic districts.

	(1)	(2)	(3)	(4)
HDPost: 1%–24%	0.059***	0.087***	0.068***	0.037*
	(0.022)	(0.023)	(0.026)	(0.021)
HDPost: 25%–75%	0.097***	0.119***	0.073***	0.098***
	(0.022)	(0.023)	(0.023)	(0.017)
HDPost: 76%–100%	0.061	0.119***	0.018	0.193***
	(0.037)	(0.040)	(0.039)	(0.037)
HDEver: 1%–24%	–0.054***			
	(0.017)			
HDEver: 25%–75%	–0.040*			
	(0.023)			
HDEver: 76%–100%	0.000			
	(0.034)			
HDTrend			–0.000***	
			(0.000)	
TPost: 1%–24%			0.003**	
			(0.001)	
TPost: 25%–75%			0.004***	
			(0.001)	
TPost: 76%–100%			0.008***	
			(0.001)	
Constant	0.268***	0.256***	0.549***	0.320***
	(0.005)	(0.016)	(0.016)	(0.019)
Observations	4,998	4,998	4,998	3,598
Tract FE	no	yes	yes	yes
CD × Decade FE	yes	yes	yes	yes
Adj. R^2	0.463	0.672	0.677	0.767

Notes: Robust standard errors clustered by census tract.

*$p < .1$, **$p < .05$, ***$p < .01$.

Table 8. Regression of median household rent (logged) in historic districts.

	(1)	(2)	(3)	(4)
HDPost: 1%–24%	0.011	–0.041	–0.049*	–0.033
	(0.039)	(0.027)	(0.028)	(0.037)
HDPost: 25%–75%	0.048	–0.026	–0.026	0.018
	(0.032)	(0.024)	(0.026)	(0.024)
HDPost: 76%–100%	–0.050	–0.047	–0.038	–0.009
	(0.067)	(0.041)	(0.042)	(0.092)
HDEver: 1%–24%	0.022			
	(0.038)			
HDEver: 25%–75%	0.049*			
	(0.027)			
HDEver: 76%–100%	0.264***			
	(0.071)			
HDTrend			–0.000	
			(0.000)	
TPost: 1%–24%			0.001	
			(0.001)	
TPost: 25%–75%			0.000	
			(0.001)	
TPost: 76%–100%			–0.001	
			(0.001)	
Constant	6.750***	6.813***	6.852***	6.839***
	(0.008)	(0.014)	(0.035)	(0.017)
Observations	3,979	3,979	3,979	2,864
Tract FE	no	yes	yes	yes
CD × Decade FE	yes	yes	yes	yes
Adj. R^2	0.656	0.897	0.897	0.885

Notes: Robust standard errors clustered by census tract.

*$p < .1$, **$p < .05$, ***$p < .01$.

stock in New York City, are insensitive to changes in the historic status of a neighborhood. While this is a plausible explanation for our findings, we cannot test it with the data currently available.

Recommendations for Planners and Practitioners

Between 1965 and 2009, the New York City Landmarks Preservation Commission designated 100 historic neighborhoods and approved extensions to 13 of those districts. While some critics contend that such districts fuel gentrification, we have had—until now—very little evidence on how the socioeconomic characteristics and racial composition of neighborhoods change after districts are designated.

The story we uncover about the relationship between historic preservation and neighborhood change is likely to invite mixed reactions. We find that, on average, neighborhoods that comprise historic districts experience an increase in socioeconomic status relative to other nearby neighborhoods after designation. Some may welcome this result as offering new evidence that historic districts spur investment in neighborhoods. Yet others may view our findings as supporting the charge that the designation of historic districts can lead to gentrification and residential displacement.

Although our research design does not enable us to say with certainty that the historic district designation actually causes these changes, it does allow us to rule out most of the alternative stories. Any plausible explanation for these findings (beyond the designation of the district itself) would have to identify a factor unrelated to designation that consistently

led to demographic changes within districts immediately after designation, but had no impact on the neighborhoods immediately surrounding those districts. Alternatively, it is possible that districts tend to be designated at precisely the time when they are starting to see a growth in income and socioeconomic status. In other work, however, we see no evident pre-designation trends in housing prices (Been et al., in press).

While we find clear evidence of changes in a neighborhood following designation, our research design only hints at the mechanisms leading to these changes. One possibility is that higher housing prices exclude low-income residents and attract high-income households. Although our failure to find any increase in neighborhood rents raises questions about this story, previous research often reports a bump in property values after the designation of a historic district.

It is also possible that incomes rise and poverty falls after designation because the number of housing units available to rent within a district declines. We do find that homeownership rates increase after a neighborhood has been designated as part of a historic district, perhaps as a result of the conversion of multifamily dwellings into single-family homes, or the sale of rental units to homebuyers. Given that low-income households disproportionately rent their housing units, a decline in rental units means fewer housing options for low-income households.

Finally, the upgrade in socioeconomic status of a neighborhood may result from differences in the taste for preservation. Certain groups—for example, college-educated residents—that place a premium on living in historic districts may be willing to outbid others for homes in designated neighborhoods.

Regardless of the precise mechanism, our findings present a dilemma for planners concerned about balancing the many benefits of historic preservation with the realities of socioeconomic change. The challenge for planners is to consider how city governments can work to preserve the historic amenities of neighborhoods—which may attract higher-income, college-educated residents in to the community—while ensuring that longstanding residents are not pushed out (Birch & Roby, 1984; Fein, 1985). Cities should make sure that preservation officials coordinate with affordable housing agencies and organizations as they make land use decisions to ensure that affordable housing options are preserved within or near these historic neighborhoods. Mitigating the potentially negative impact of preservation on low-income populations would help to allay the concerns of critics who argue that preservation is simply gentrification by another name.

Notes

1. In an initial comparison of neighborhoods designated as historic districts to those not designated, we find stark differences in neighborhood characteristics. In 2010, the average census tract in a district was 80% White and 9.5% Black, but the average census tract not in a historic district was only 43% White and almost 30% Black. More than 90% of residents living in tracts located in historic districts hold a college degree in 2010, compared with only 33% in tracts outside historic districts. These comparisons are between tracts with at least 75% of the parcels located within a historic district, and those tracts that do not include any parcels in a designated historic district.

2. The administrative code associated with the landmarks preservation law mandates one of the key purposes of the legislation is to "…stabilize and improve property values in the district" (Title 25: Land Use, Chapter 3: Landmarks Preservation and Historic Districts, § 25-301).

3. For additional information on the restrictions imposed on property owners, see Been et al. (in press).

4. Again, in the justification to the law, the city identified one goal to "…protect and enhance the city's attractions to tourists and visitors" (Title 25: Land Use, Chapter 3: Landmarks Preservation and Historic Districts, § 25-301).

5. Coulson and Leichenko (2004) identify 1,338 residential properties designated by the National Register of Historic Places, the Texas Historical Commission, and local preservation boards.

6. Describing the transformation of downtown Brooklyn, Kasinitz (1988) tells the story of preservation efforts in Boerum Hill, a community in the heart of brownstone Brooklyn. As they moved into the neighborhood in the 1960s, newcomers touted the historic nature of their community as a tool for neighborhood preservation, hoping that the recognition of a historic community would save their neighborhood from the shovels of urban redevelopment. Savvy about their social and political connections, Kasinitz (1988) argues that residents used historic preservation as a tool to protect their neighborhood from exogenous forces of redevelopment, suggesting that demographic shifts predated historic district designation in Boerum Hill. These early activists helped to improve the public image of Boerum Hill through the preservation process, ultimately speeding the pace of neighborhood change as homeowners replaced renters.

7. The geography of census tracts is a common proxy for neighborhoods. While block groups could allow for a more fine-grained analysis of neighborhood-level change, the Neighborhood Change Database does not include a longitudinal panel of block groups.

8. New York City includes 59 community districts in total, but only 32 of those districts include tracts located within a historic district.

9. Seven tract-years are missing, leaving a total of 4,998 for most of our regressions. For median rent, we only have data for 1980 through 2010, so the sample size is smaller.

10. Rather than controlling for average differences between tracts with parcels in historic districts and those without, which we do with the *HDEver* variables in our first model, the second model controls for fixed attributes of the individual census tracts themselves.

11. At the suggestion of one reviewer, we also estimate models for the total population in a tract, the population living below the poverty line, and the share of households with children. These findings corroborate the story presented in this study. We find evidence of a decline in the total population and the number of people living below the poverty line. There is a positive impact of preservation on the share of families with children for tracts with 75% of parcels in a historic district.

12. We reestimate the full set of models for the tracts located in the outer boroughs. For each of the outcomes, we find that the results are

consistent with the results from the full set of tracts. We choose to show the results for Model 2, which do not include the *TPost* or trends variables, because these models provide a more straightforward interpretation of the impact of historic preservation on neighborhoods.

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Technical Appendix

Our basic methodological strategy estimates a difference-in-difference panel regression model that assesses the extent to which preexisting differences between neighborhoods that become historic districts and other nearby neighborhoods that do not grow or shrink following district designation. Throughout the analysis, each observation is a census tract observed in a particular decade (e.g., 1970, 1980, etc.)

We start with a simple difference-in-difference model in which the dependent variable captures an attribute of the census tract n in decade *t*, for example, the poverty rate. Specifically, we estimate the following equation:

$$P_{ndt} = \alpha + \delta_{dt}\,I_{dt} + \theta HD_{nt} + \varepsilon_{it}, \qquad (1)$$

where P_{ndt} is the poverty rate of census tract *n*, in community district *d*, and in year *t*; I_{dt} are a series of dummy variables indicating the year and community district, which allow us to control for economic and demographic trends within the community district; and HD_{nt} is our vector of historic district variables. We report standard errors clustered at the census tract level.

Within the vector *HD*, we first include a set of dummy variables that capture whether a census tract will have parcels located in a historic district by 2010. Specifically, we include three such variables: *HDEver1-24, HDEver25-75,* and *HDEver76-100*, which respectively take on a value of 1 if at least 1% but less than 25%, 25% to 75%, or more than 75% of a tract's parcels are within a historic district in 2010. These variables capture baseline, unmeasured differences between neighborhoods with properties in historic districts and those without any historic districts. We also include a set of time-varying variables that take on the value of 1 if 1% to 24%, 25% to 75%, or more than 75% of a tract's parcels are within a designated historic district in that particular year: *HDPost1-24, HDPost25-75,* and *HDPost76-100*. The coefficients on these variables capture the impact of designation.

To more fully control for baseline differences between census tracts with parcels in historic districts and those with-

out, we estimate a second model with census tract fixed effects. Rather than controlling for average differences between tracts with parcels in historic districts and those without, this model controls for fixed attributes of the individual census tracts themselves, allowing us to more precisely estimate how those tracts with parcels in districts change after the designation of districts when compared with nearby tracts in the same community district that do not see an increase in parcels in historic districts. Specifically, we estimate the following regression model:

$$P_{ndt} = \alpha + \gamma_c\,W_c + \delta_{dt}\,I_{dt} + \theta HD_{nt} + \varepsilon_{it}, \qquad (2)$$

which is identical to the first model with the exception of the addition of W_c, a series of census tract fixed effects, and the omission of the *HDEver* variables, which cannot be estimated together with census tract fixed effects.

While this model controls for differences in average characteristics between tracts with historic districts and those without, it does not control for differences in prior trends in neighborhoods with districts and those without. It is possible that tracts with parcels that were designated as part of a historic district were already experiencing trends in neighborhood characteristics prior to designation that differed from those occurring in other nearby neighborhoods. Our final model controls for any such trends by including a counter variable, *HDTrend*, that is measured only for census tracts that have at least one parcel that is or will become part of a historic district. This variable measures the number of years since designation, taking on negative values for census years prior to designation. For example, if all parcels in a tract are designated as a historic district in 1983, then *HDTrend* would take on a value of –13 in 1970, –3 in 1980, +7 in 1990, +17 in 2000, and +27 in 2010. The coefficient on this variable captures the extent to which trends in census tracts that eventually become part of historic districts differ from trends in other tracts in the same community district.

In this last model, we also include *TPost*, which equals the number of years *after* the designation of a historic district. For tracts that have parcels that will be included in a historic district, the *TPost* variable is coded 0 in decades prior to designation. For census tracts that include no parcels that will be included in a historic district, the *TPost* variable is always coded 0. The coefficient on the *TPost* variable thus shows how the impact of designation unfolds over time, indicating the difference between the actual changes that occurred after designation (relative to the community district) and the changes that would have occurred regardless of designation had the composition of a tract continued to change at the same rate it was changing prior to designation.