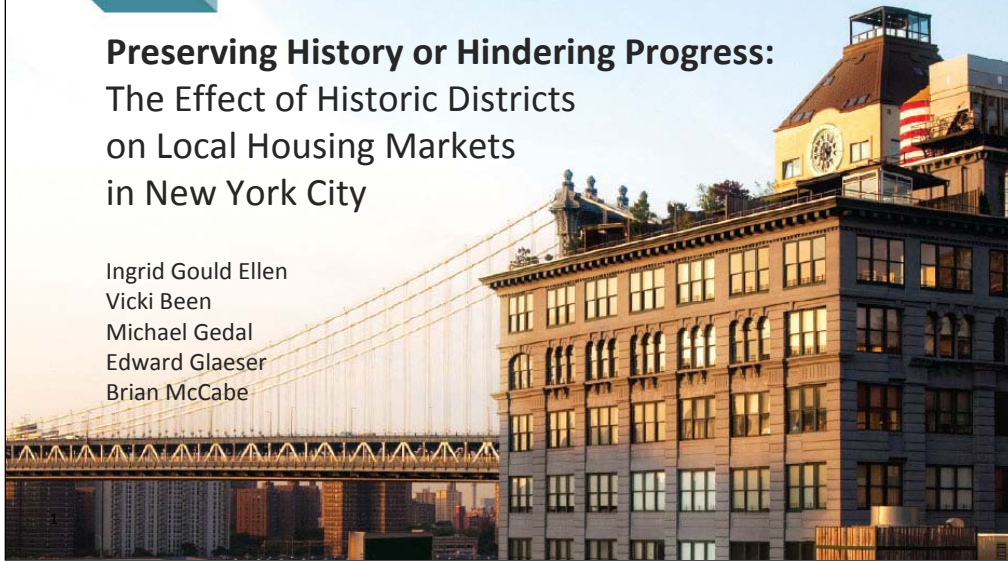


Preserving History or Hindering Progress: The Effect of Historic Districts on Local Housing Markets in New York City

Ingrid Gould Ellen
Vicki Been
Michael Gedal
Edward Glaeser
Brian McCabe



Very much interdisciplinary work – with legal scholar, economists, sociologist and policy scholars.

Disclaimers



The views represented here do not necessarily reflect those of the NYC Department of Housing Preservation and Development, the Federal Reserve Bank of New York or the Federal Reserve System



the paper's conclusions reflect neither the views of HPD, where Vicki Been is now commissioner, nor the Federal Reserve Bank, where Wagner alumni Mike Gedal now works.

Preserving Historic Neighborhoods in New York



Preservationists & their critics have debated the merits of historic preservation for decades. Nowhere has this debate been more fierce than in NYC, where the preservation movement was launched with the demolition of the much beloved Beaux Arts Penn Station. That demolition prompted the creation of the Landmarks Preservation Commission in 1965. Fifty years later, we have 111 historic districts in New York City.

Research Questions

- How does the designation of historic districts affect the value of residential properties within district boundaries?
- How does designation affect the value of residential properties just outside district boundaries?



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4

We focus on one aspect of the preservation debate – which is how the designation of historic districts affects property values

We study

(1) how the designation of historic districts affects the value of residential properties within district boundaries and how that varies across neighborhoods

(2) How designation affects the price of residential properties just outside district boundaries

Research Questions

- How does the designation of historic districts affect the value of residential properties within district boundaries?
- How does designation affect the value of residential properties just outside district boundaries?
- How does designation affect neighborhood composition?



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5

We focus on one aspect of the preservation debate – which is how the designation of historic districts affects property values

We study

(1) how the designation of historic districts affects the value of residential properties within district boundaries and how that varies across neighborhoods

(2) How designation affects the price of residential properties just outside district boundaries

Answer:

- It depends!
- Intuition:
- Designation brings benefits and costs
 - Good news: Preserves historic character and provides certainty
 - Bad news: Restricts ability to redevelop

6



The answer, of course, is that it depends...

I won't go through out full-blown theory, but the basic intuition is that designation brings both benefits and costs.

The good news is that they preserve historic character and provide certainty to homeowners.

The bad news is that they restrict your right to build.

Designation Protects Historic Character



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So if you live on this lovely West Village street, the Greenwich Village historic district assures you that your neighbors across the street won't tear their buildings down

Ensures that Neighbors Won't Build This:



and build this building in their place. (For those of you that don't recognize this building, it's the HUD building in DC, and which Jack Kemp affectionately described as 10 floors of basement...)

Of course, at the same time, the cost of being in a district is that as an individual owner, you lose the right to tear down your own property and build up.

Theory of Heterogenous Effects

- Historic designation brings benefits/costs
 - Preserves historic character and provides certainty
 - Restricts ability to redevelop
- Impact will vary across neighborhoods depending on relative size of benefits and costs
- Benefits outweigh costs when
 - Value of lost option to redevelop is smaller
 - Areas where properties already developed to allowable max
 - Lower demand/lower value areas
 - Historic amenity value high



9

Based on previous research, as well as theory we begin to develop in the beginning of this paper, we outline a couple propositions about how we expect historic districts to shape both the supply and demand of residential property.

First ... preservation preserves historic character – creates certain about the neighborhood – creates a level of confidence that the immediate neighborhood won't change – this might be particularly important in neighborhoods facing development pressures, or in quickly changing neighborhoods

On the other hand - Regulatory burdens. These restrictions are likely to reduce the supply of housing and, in the face of strong demand, increase the price of housing more than would have happened in the absence of restrictions. Limits the ability of property owners to create improvements that would maximize the value of their property.

Second ... Special status. We may anticipate a boost in prices because properties have a special status, or because the character of the surrounding neighborhood would be preserved from development deemed out-of-character. Restrictions minimize the possibility that other properties will be redeveloped in ways unattractive to local property owners.

Third ... Buffers. We raise the possibility that historic districts may impact properties located in the buffer zones – a 250-foot boundary we've drawn around these districts. Properties in the buffer are likely to enjoy the same benefits of preserving the historic character of their neighborhoods, but without the regulatory restrictions, and we may

Predictions from Theory

- Historic district designation should boost value of properties just outside districts
 - No restrictions; enjoy benefits of adjacent historic neighborhood
- Within districts, historic designation should boost property values in neighborhoods where historic value is high and the value of the option to redevelop is relatively low

10



So given these benefits and costs... the designation of districts should unambiguously boost the value of properties just outside the districts. To some extent, these bordering properties get the best of both worlds, they enjoy the benefits of the adjacent historic neighborhood but they don't face any restrictions on alterations themselves. Within districts, the impact on prices is unclear. District designation should boost property values in neighborhoods where the value of the option to redevelop is low (so owners aren't giving up much) and potentially reduce them in areas where rebuilding would be very valuable.

Proposed Harrison Street Historic District



So for instance, in low-density, single-family home neighborhoods like Harrison Street in Staten Island, we expect that designation should increase property values because even without the district, owners wouldn't be allowed to build much larger buildings, and if they were, those buildings wouldn't be as valuable as they are in Manhattan. So owners are giving up much less valuable development rights than they are giving up in

Greenwich Village Historic District



In Greenwich Village, where but for the district, property owners could tear down their properties and build tall, valuable residential buildings, as you can see in the background of this photograph.

METHODS: BASIC INTUITION



Inside District



Outside District

Compare price difference before and AFTER designation



So how do we test this? I won't go into the bells and whistles of our statistical model... but basically, we compare the prices of homes located inside districts to the prices of comparable homes that are in the same neighborhood but just outside the district and its border before the district is designated and then test how that differential changes after designation.

EMPIRICAL STRATEGY

- Difference-in-difference approach
 - Compare price of properties inside historic districts (or just outside) to price of comparable properties
 - Study how pre-designation price differences change after designation
 - Examine both initial changes and how those post-designation changes evolve over time
- Comparison groups
 - Properties just outside historic districts but still in the same census tract
 - Properties just outside districts but still in the same zip code
 - Properties in neighborhoods that will become historic districts in the future

METHODS: IDENTIFYING PRICE EFFECTS

- Difference-in-difference hedonic price model

$$\ln P_{icdt} = \alpha + \beta X_{it} + \gamma HD_{it} + \delta_c W_c + \rho_{dt} I_{dt} + \varepsilon_{it},$$

- HD vector includes
 - *HistoricDistrictEver*
 - *HistoricDistrictPost*
 - *TimePost*
 - *TimePostSQ*



15

Specifically, for price analysis, our dependent variable is log of price per unit... the indep variables include a vector of structural characteristics X , census tract fixed effects W , and a set of dummy variables indicating both the year and the community district. The key variables of interest are in the HD vector. We include *HistoricDistrictEver* that takes on value of 1 for a property located in an area that is or WILL BECOME designated as a historic district. This variable captures baseline, unmeasured differences between properties located within historic districts and comparable properties outside of them. *HistoricDistrictPost* then captures the immediate impact of the district designation on prices, while *TimePost* and *TimePostsquared* allow the impact to vary over time.

We run a hedonic regression, using the ...

-Log of the Sales Price for Property “I” in Census Tract “C” in Community District “D” in Quarter “T” as our outcome.

- X is a vector of property-related characteristics & building classification dummies, most of which I won’t show in the following tables.

- W is a series of Census Tract fixed effects

- I is a series of indicators for the quarter & community district in which the sale took place, allowing us to control for district-specific trends

-HD is our vector of historic district-related variables, which are the main variables of interest in this paper. When we get to the regression results, I will talk more about the variables captured in the vector of historic district variables.

METHODS: IDENTIFYING PRICE EFFECTS

- Difference-in-difference hedonic price model

$$\ln P_{icdt} = \alpha + \beta X_{it} + \gamma HD_{it} + \delta_c W_c + \rho_{dt} I_{dt} + \varepsilon_{it},$$

- HD vector includes

- *HistoricDistrictEver* *BufferEver*
- *HistoricDistrictPost* *BufferPost*
- *TimePost* *BufferTimePost*
- *TimePostSQ* *BufferTimePostSQ*



16

In some models, we also include the same set of variables for properties in buffer zone, or located within 250 feet of a district boundary to explore impacts on neighboring properties.

MAP OF DISTRICT AND BUFFER ZONE

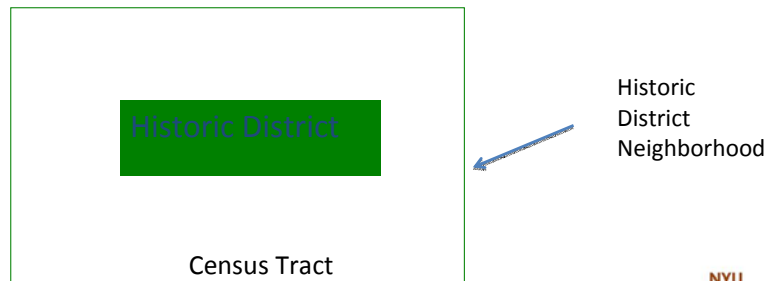


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TWO buffer zones – 250 feet and 500 feet

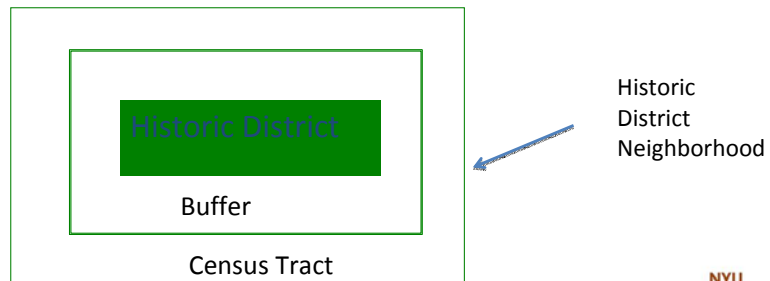
METHODS: IDENTIFYING CONSTRUCTION EFFECTS

- Difference-in-difference model
- Compares number of new units built in historic district to number of units built in its bordering census tracts, and tests how difference changes post-designation



METHODS: IDENTIFYING CONSTRUCTION EFFECTS

- Difference-in-difference model
- Compares number of new units built in historic district to number of units built in its bordering census tracts *outside buffer*, and tests how difference changes post-designation



METHODS: IDENTIFYING CONSTRUCTION EFFECTS

- Difference-in-difference model of number of new housing units built in area i in historic district neighborhood n in year t
- “Areas” = historic districts or bordering tracts

$$\begin{aligned}
 NU_{int} = & \alpha + \beta_1 District_{inj} + \beta_2 Post_{int} \\
 & + \beta_3 District_Post_{int} \\
 & + \delta_n W_n + \rho_t I_t + \varepsilon_{it},
 \end{aligned}$$

- W_n = Historic district “neighborhood” fixed effects
- $Post$: 1 if the district associated with neighborhood has been designated
- $District*Post$: 1 if area is historic district and it’s been designated.



20

To estimate impacts on housing supply, we estimate a difference-in-difference model that tests whether the amount of investment in properties (as proxied by the issuance of alteration permits) within a district changes after designation relative to investment in properties that are just outside the district but still in the same neighborhood. The model is very similar to price regression but dependent variable is whether or not a property i in census tract c received a renovation permit in year t .

DATA SOURCES

- Residential sales (450,000 between 1974-2009)
 - Tax lot of building, price and date of sale
- Location and structural characteristics of properties
 - Building age, corner lot, property type, square footage, etc.
- Buildable capacity
 - Floor area ratio allowed (PLUTO dataset)
 - Actual square footage in 2003 (PLUTO dataset)
- Historic district designations
 - Maps of historic districts (PLUTO dataset)
 - Timing of district designations (LPC records)

21



We rely on a number of administrative datasets to conduct our analysis.

For Price Regressions:

- All residential property transactions between 1974 and 2009.
- Limited to arms-length sales.
- Restricted to the 32 community districts containing at least one lot in a historic district.
- Matched with property characteristics and location in historic districts.

For New Units Regressions:

We restrict the sample to lots in census tracts that included at least one parcel within a historic district as of 2009

We create a longitudinal dataset, which records the number of new units constructed annually between 1990 and 2009, separately for each historic district itself and for the set of properties just outside but still within the same census tracts.

For Building Permit

We use data on building alteration permits issued between 1990 and 2009 from the New York City Department of Buildings (DOB)

We create a longitudinal dataset recording the number of permits issued annually for all properties located within census tracts that included at least one property in a historic district by 2009. We use this database to analyze whether the probability of receiving a permit changes significantly following historic designation. The permit analysis includes residential properties, as well as the following building types: warehouse; factory; garage or parking; hotels; theaters; store building; loft building; religious uses; office; multi-use. Approximately 10 percent of properties in the sample are non-residential.

PRESERVING HISTORIC NEIGHBORHOODS IN NEW YORK CITY

	Aggregate		By time period of designation				
	Total Number of Districts	Percentage of Total Districts	1965 - 1969	1970s	1980s	1990s	2000- 2009
Manhattan	65	58%	10	11	13	16	15
Brooklyn	29	26%	3	11	4	1	10
Bronx	10	9%	1	0	4	4	1
Queens	6	5%	1	0	0	2	3
Staten Island	3	3%	0	0	1	1	1
Total	113	100%	15	22	22	24	30
% of total			13%	19%	19%	21%	27%

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22

This table shows that by 2009, when our study period ends, the Commission had designated 100 neighborhoods as historic, and extended the boundaries of existing districts in another dozen cases. And over the last couple years, we've seen another twenty districts designated in neighborhoods throughout the city.

You can see from this table that designation takes place in neighborhoods across the city, not just those in Manhattan. Although about half of all districts are in Manhattan, one-quarter are in Brooklyn and just under 10 percent are in Queens. The distribution of districts across the five boroughs is shown in the panel on the left.

In the panel on the right, you can see that the city has been relatively steady in designating neighborhoods over the last couple decades.

DESCRIPTIVE STATISTICS

Descriptive Statistics of Residential Property Transactions, 1974-2009

	Properties in a Historic District (2009)	Properties <i>not</i> in a Historic District (2009)
Number of sales		
Total	32,264	416,290
Sale occurred after designation	23,862	-
Sale occurred in 0-250 ft. buffer	-	17,071
Lot area (sq. ft.)	7,758	13,758
Building area (sq. ft.)	4,043	2,962
Corner	0.054	0.080
Irregular	0.109	0.113
Garage	0.045	0.267
Altered	0.117	0.042
Building age	75.034	56.431
Pre-War	0.668	0.473



Construction is generally lower on blocks that become historic districts than it is in the far buffer blocks – but construction is depressed further within districts after designation. Effect is somewhat larger in Manhattan. Result is robust to inclusion of buffer variables.

DESCRIPTIVE STATISTICS

Descriptive Statistics of Residential Property Transactions, 1974-2009 (Continued)

	Properties in a Historic District (2009)	Properties <i>not</i> in a Historic District (2009)
<i>Building class</i>		
Single-family detached	0.127	0.192
Single-family attached	0.045	0.118
Two-family home	0.140	0.211
Three-family home	0.066	0.060
Four-family home	0.041	0.020
Five/six-family home	0.026	0.017
More than six families, no elevator	0.040	0.029
Walk-up, units not specified	0.082	0.017
Elevator apt bldg, coop	0.010	0.003
Elevator apt bldg, not coop	0.020	0.011
Loft building	0.006	0.001
Condominium, SF attached	0.038	0.008
Condominium, walk-up apartments	0.020	0.044
Condominium, elevator building	0.309	0.242
Condominium, miscellaneous	0.004	0.001
Multi-use, single family with store	0.005	0.004
Multi-use, two-family with store	0.008	0.012
Multi-use, three-family with store	0.004	0.003
Multi-use, 4+ family with store	0.008	0.007



Construction is generally lower on blocks that become historic districts than it is in the far buffer blocks – but construction is depressed further within districts after designation. Effect is somewhat larger in Manhattan. Result is robust to inclusion of buffer variables.

RESULTS: NEW CONSTRUCTION, 1990-2009

	Citywide	Manhattan
Historic District	-10.78*** (2.37)	-14.72*** (4.76)
Post Designation	-1.722 (6.14)	-5.875 (10.90)
Historic District*Post	-14.37*** (4.35)	-22.29*** (7.66)
N	2,520	1,320



Construction is generally lower on blocks that become historic districts than it is in the far buffer blocks – but construction is depressed further within districts after designation. Effect is somewhat larger in Manhattan. Result is robust to inclusion of buffer variables.

RESULTS: HOUSING PRICES BUFFER ZONES

Citywide		
	(1) Average effect (no cap)	(2) Impact can vary with time (no cap)
<i>Buffer variables (250 feet)</i>		
Buffer Ever	-0.03694*** (0.00978)	-0.05496*** (0.00989)
Buffer Post	0.11923*** (0.01029)	-0.0078 (0.01637)
Buffer Time Post		0.01364*** (0.00165)
Buffer Time Post Squared		-0.00022*** (0.00004)

Footer here

RESULTS: HOUSING PRICES WITHIN-DISTRICT PRICE IMPACTS

Citywide		
	Average effect	Time-varying effect
HDEver	0.21033*** (0.06055)	0.19721*** (0.06085)
HDPost	0.14832*** (0.05627)	0.03465 (0.04974)
Tpost		0.00832 (0.00571)
TPostSQ		-0.00001 (0.00013)
Observations	448,554	448,554
Adj. R-squared	0.78178	0.78200

Standard errors clustered by tract in parentheses.

*** p<0.01, ** p<0.05, * p<0.1



27

In the paper, these tables include the full set of regression coefficients from the model, but I've included only the relevant ones to our research question here.

HD-Ever – takes a value of 1 if the property is located in an area that is – or will become a historic district.

HD-Post – takes the value of 1 if the sale took place inside a historic district after it had been designated, allowing us to capture the unique effect of designating a district.

Time Post – Is the number of years after designation that the sale took place, and allows to examine variation in the impact of districts across time.

The first three columns are reported for the entire city, and the fourth column is results for Manhattan only.

Model 1 captures the average effect of designation *in the ten-year period following the designation*.

Model 2 captures the average effect over the entire post-designation period.

Model 3 allows the impact of designation to vary, so we can read the HistoricDistrictPost coefficient as the immediate impact that occurs after designation.

Model 4 is simply restricted to residential transactions in Manhattan only.

Model 1 captures the average effect of designation *in the ten-year period following the designation*.

Results: After controlling for other structural characteristics, properties located in areas that are or will become historic districts sell for 32 percent more than comparable properties outside those districts. The designation of a historic district generates a 4.7 percent boost in sales prices relative to comparable properties outside the district but still in the same neighborhood in the ten-year period

RESULTS: HOUSING PRICES WITHIN-DISTRICT PRICE IMPACTS

	Manhattan		Outer boroughs	
	Average effect	Time-varying effect	Average effect	Time-varying effect
HDEver	0.32517*** (0.06859)	0.32863*** (0.07038)	0.20572*** (0.06842)	0.20098*** (0.06876)
HDPost	-0.05991 (0.05977)	-0.07471 (0.05983)	0.12585* (0.06465)	-0.00507 (0.05875)
Tpost		0.00404 (0.00752)		0.01435** (0.00583)
TPostSQ		-0.00015 (0.00020)		-0.00025* (0.00014)
Observations	122,091	122,091	326,463	326,463
Adj. R-squared	0.73636	0.73638	0.78841	0.78853

Standard errors clustered by tract in parentheses.

*** p<0.01, ** p<0.05, * p<0.1



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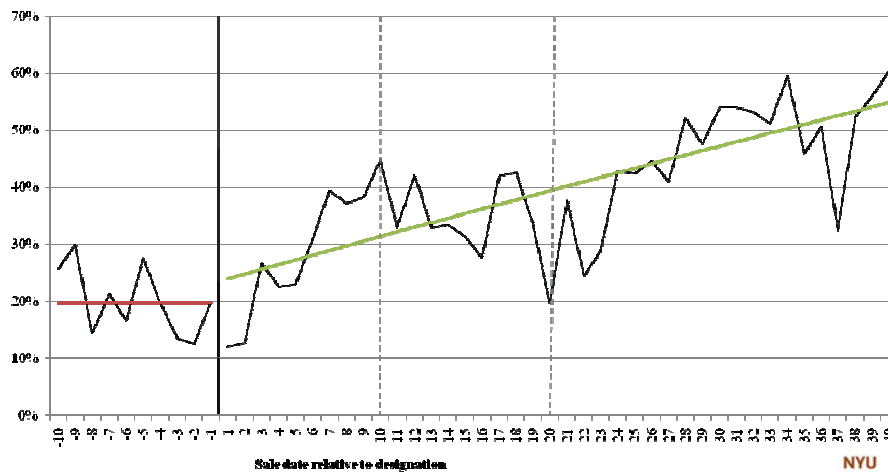
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REGRESSION-ADJUSTED PRICE PATTERNS, BEFORE AND AFTER DESIGNATION



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29



In these figures – for the city– we plot the coefficients from a more flexible model that includes an indicator for each years since designation, along with a trend line generated from the regression coefficients. In both, you see prices rising consistently after designation.

RESULTS: HOUSING PRICES SENSITIVITY TO STANDARD ERRORS CLUSTERING

SE Clustered by:	Manhattan: Time-varying effects		
	Tract	Block	BBL
HDEver	0.32863*** (0.07038)	0.32863*** (0.06328)	0.32863*** (0.02502)
HDPost	-0.07471 (0.05983)	-0.07471 (0.06167)	-0.07471** (0.03040)
Tpost	0.00404 (0.00752)	0.00404 (0.00706)	0.00404 (0.00286)
TPostSQ	-0.00015 (0.00020)	-0.00015 (0.00018)	-0.00015** (0.00007)
Observations	122,091	122,091	122,091
Adj. R-squared	0.73638	0.73638	0.73638

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30



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RESULTS: HOUSING PRICES SENSITIVITY TO STANDARD ERRORS CLUSTERING

SE Clustered by:	Outer boroughs: Time-varying effects		
	Tract	Block	BBL
HDEver	0.20098*** (0.06876)	0.20098*** (0.03637)	0.20098*** (0.01309)
HDPost	-0.00507 (0.05875)	-0.00507 (0.03535)	-0.00507 (0.02127)
Tpost	0.01435** (0.00583)	0.01435*** (0.00349)	0.01435*** (0.00230)
TPostSQ	-0.00025* (0.00014)	-0.00025*** (0.00009)	-0.00025*** (0.00006)
Observations	326,463	326,463	326,463
Adj. R-squared	0.78853	0.78853	0.78853

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31



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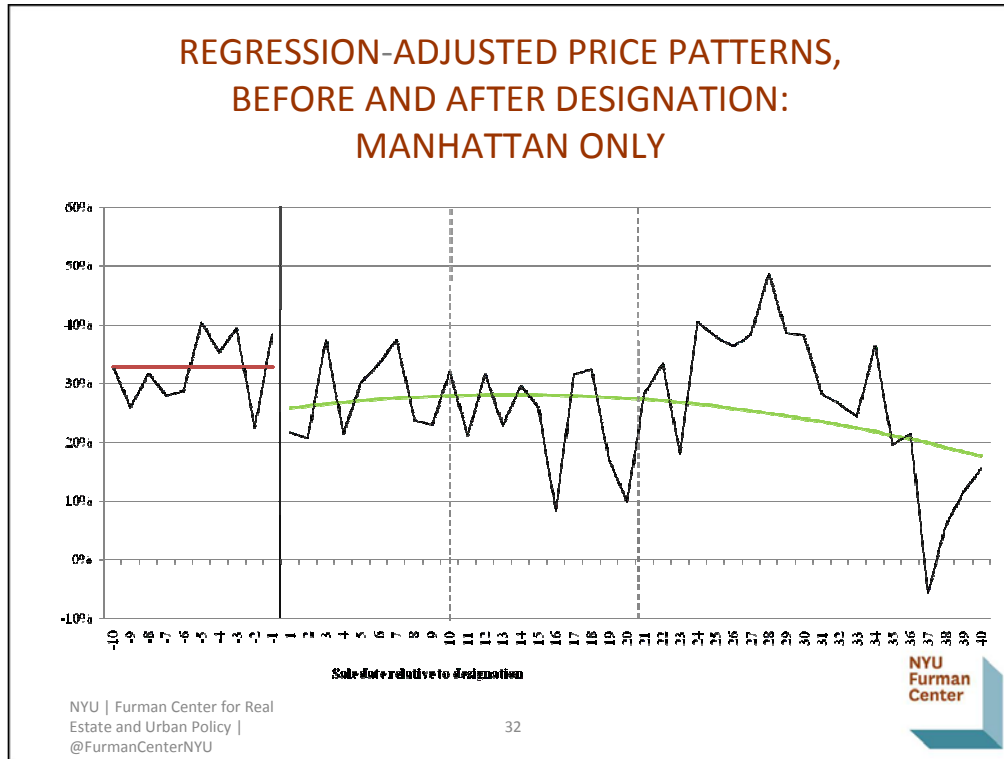
Model 2 captures the average effect over the entire post-designation period.

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In these figures – for Manhattan – we plot the coefficients from a more flexible model that includes an indicator for each years since designation, along with a trend line generated from the regression coefficients. In Manhattan, you see prices rising slightly after designation for about 15 years, and then falling after that ...

METHODS: HETEROGENEITY

- Test more formally whether the impact is less positive in areas where the lost option of redevelopment is larger
- Test for heterogeneity in impacts by stratifying sample depending on whether community district falls above the district median in:
 - Average maximum floor-area ratio (FAR) per sq foot of land
 - Average unused FAR per sq foot of land
 - Median price per square foot for new units (1974-1990)
 - Value of average maximum FAR
 - Value of average unused FAR

RESULTS: HOUSING PRICES STRATIFIED BY TOTAL & UNUSED FAR IN NBHOOD

	Total FAR in the CD		Unused FAR in the CD	
Hist. Dist. Ever	0.21567*** (0.01345)	0.22385*** (0.01353)	0.24489*** (0.01391)	0.25867*** (0.01402)
Hist. Dist. Post	0.03995*** (0.01527)	0.12421*** (0.02309)	0.05019*** (0.01618)	0.11497*** (0.02414)
Time Post		-0.00127 (0.00265)		0.0029139 (0.00265)
Time Post Sq.		- (0.00007)		-0.00028*** (0.00007)
High*HD Ever	0.18256*** (0.02357)	0.17495*** (0.02384)	0.14276*** (0.02438)	0.12232*** (0.02461)
High * HD Post	-0.06815*** (0.02475)	- (0.03401)	-0.07233*** (0.02585)	-0.17235*** (0.03531)
High * TPost		0.00977*** (0.00359)		-0.0009471 (0.00373)
High * TPost Sq		-0.00001 (0.00009)		0.00033*** (0.00010)
Observations	448,554	448,554	448,554	448,554
Adjusted R ²	0.80331	0.80342	0.80327	0.80341

2

34



Finally, we test whether the impact of designation on housing prices is related to the characteristics of the neighborhood.

In neighborhoods with more unused building capacity – in other words, where existing structures are built further below the allowed zoning limits - we expect designation to have a more negative effect on property values

We interact each of the variables in the HD vector with an indicator variable that equals “1” for properties located in community districts that have more unused building capacity than the median community district. The pattern of coefficients displayed here suggests that designation does indeed tend to have a more negative effect in neighborhoods with more unused buildable area, as hypothesized.

RESULTS: HOUSING PRICES STRATIFIED BY PRICE, VALUE OF FAR IN NBHOOD

	Median price per square foot for newly built housing in the CD		Dollar value of Total FAR in the CD		Dollar value of Unused FAR in the CD	
Hist. Dist. Ever	0.15791*** (0.01631)	0.16618*** (0.01639)	0.23594*** (0.01441)	0.24518*** (0.01450)	0.23802*** (0.01522)	0.24818*** (0.01532)
Hist. Dist. Post	0.09080*** (0.01773)	0.19012*** (0.02599)	0.03271** (0.01589)	0.15343*** (0.02311)	0.03170* (0.01689)	0.12818*** (0.02442)
Time Post		-0.00497* (0.00268)		-0.00789*** (0.00260)		-0.00471* (0.00280)
Time Post Sq.		-0.00006 (0.00007)		-0.00001 (0.00007)		-0.00009 (0.00007)
High*HD Ever	0.24277*** (0.02337)	0.23508*** (0.02357)	0.13824*** (0.02331)	0.12883*** (0.02356)	0.12999*** (0.02335)	0.12043*** (0.02358)
High * HD Post	-0.11914*** (0.02493)	-0.27318*** (0.03474)	-0.04259* (0.02458)	-0.22911*** (0.03363)	-0.03916 (0.02481)	-0.18593*** (0.03416)
High * TPost		0.01421*** (0.00361)		0.01821*** (0.00357)		0.01289*** (0.00368)
High * TPost Sq		-0.00020** (0.00009)		-0.00027*** (0.00009)		-0.00014 (0.00010)
Observations	448,554	448,554	448,554	448,554	448,554	448,554
Adjusted R ²	0.80334	0.80342	0.80077	0.80087	0.80076	0.80085



Finally, we test whether the impact of designation on housing prices is related to the characteristics of the neighborhood.

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ROBUSTNESS TESTS

- Use properties in bordering block groups and zip codes rather than census tracts as comparison.
- Use properties in *future* historic districts as comparison.
- Use calendaring date, rather than designation date
- Results are qualitatively the same in each case.

SUMMARY OF FINDINGS

- As predicted, designating historic districts boosts the value of properties just outside the district
- Designation also increases the value of properties *within* districts on average citywide
- *But...* our results highlight that impacts vary across neighborhoods in systematic manner
 - Property values increase more when value of lost option to redevelop is lower
 - Property values may even decline in areas where the value of option to redevelop is very high



IMPLICATIONS

- Findings add nuance to preservation debates
- But do not end them
- We are *not* capturing
 - Value of preservation to city residents and others more broadly
 - Increase in housing prices citywide that might result from supply restriction

38



To be sure, our findings do not end all debates about preservation. Our analysis does not capture the value of preserving architectural heritage to residents outside the neighborhood and to others more broadly. Similarly, we are not capturing broader impacts on housing prices, as a result of restricted supply. Decisions about preservation ultimately involve value judgments, which neither our theory or our empirical analysis can fully answer, but we hope our work helps to frame and inform those tough choices.

Does Preservation Accelerate Neighborhood Change?

Examining the Impact of Historic
Preservation in New
York City

Ingrid Gould Ellen
Brian McCabe



Very much interdisciplinary work – with legal scholar, economists, sociologist and policy scholars.

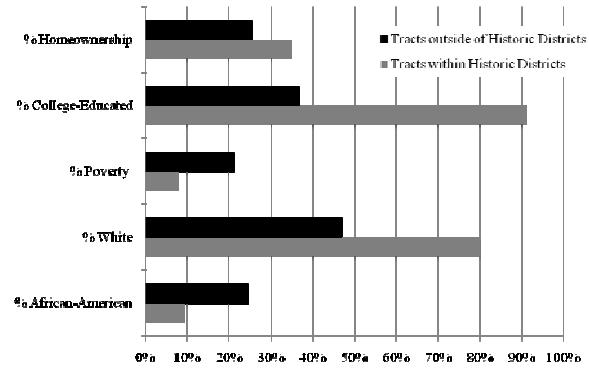
Controversy/Debate

- The perception that preservation leads to gentrification “is a burden on the profession, particularly when working in low-income communities.”
 - Ryberg-Webster and Kinahan (2014)

Research Questions

- Does the designation of historic districts contribute to changes in the racial composition of neighborhoods?
- Does designation contribute to changes in the socioeconomic status of neighborhoods?

Tract Characteristics in 2010, by HD status



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Methods

- Unit of analysis = Census tract
- Difference-in-difference regression
- Dependent variables (SES, racial composition)
- Test how tract population changes as parcels are designated, relative to other nearby tracts

- $$P_{ndt} = \alpha + \gamma_c W_c + \delta_{dt} I_{dt} + \theta HD_{nt} + \varepsilon_{it'}$$

- HD_{nt} includes:
 - Hdpost_25
 - Hdpost25_75
 - Hdpost_75_100

Data Sources

- Census tract data from Neighborhood Change Database
 - Demographic and housing data
 - 1970, 1980, 1990, 2000, 2010
 - 1,001 tracts in 32 community districts
- Historic district designations
 - Maps of historic districts (PLUTO dataset)
 - Timing of district designations (LPC)

44



We rely on a number of administrative datasets to conduct our analysis.

For Price Regressions:

- All residential property transactions between 1974 and 2009.
- Limited to arms-length sales.
- Restricted to the 32 community districts containing at least one lot in a historic district.
- Matched with property characteristics and location in historic districts.

For New Units Regressions:

We restrict the sample to lots in census tracts that included at least one parcel within a historic district as of 2009

We create a longitudinal dataset, which records the number of new units constructed annually between 1990 and 2009, separately for each historic district itself and for the set of properties just outside but still within the same census tracts.

For Building Permit

We use data on building alteration permits issued between 1990 and 2009 from the New York City Department of Buildings (DOB)

We create a longitudinal dataset recording the number of permits issued annually for all properties located within census tracts that included at least one property in a historic district by 2009. We use this database to analyze whether the probability of receiving a permit changes significantly following historic designation. The permit analysis includes residential properties, as well as the following building types: warehouse; factory; garage or parking; hotels; theaters; store building; loft building; religious uses; office; multi-use. Approximately 10 percent of properties in the sample are non-residential.

Brooklyn Heights/Cobble Hill



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Census Tracts, by Parcels in Historic Districts in 2010

None	1-25%	25-75%	> 75%
811	70	81	33

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Regression Results: Poverty Rate

	(1)	(3)
HD Post 0-25%	-0.025*** (0.010)	-0.000 (0.008)
HD Post 25-75%	-0.062*** (0.009)	-0.023*** (0.007)
HD Post 75-100%	-0.098*** (0.012)	-0.030*** (0.010)
Observations	4,998	4,998
Tract FE	NO	YES
CD_Decade FE	YES	YES
Adj. R-squared	0.629	0.839

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Regression Results: % College Grad

	(1)	(3)
HD Post 0-25%	0.062*** (0.016)	0.018 (0.011)
HD Post 25-75%	0.113*** (0.017)	0.056*** (0.012)
HD Post 75-100%	0.225*** (0.025)	0.073*** (0.016)
Constant	0.237*** (0.004)	0.294*** (0.009)
Observations	4,998	4,998
Tract FE	NO	YES
CD_Decade FE	YES	YES
Adj. R-squared	0.740	0.899

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Regression Results: Percent White

	(1)	(3)
HD Post 0-25%	0.003 (0.023)	-0.009 (0.013)
HD Post 25-75%	0.072*** (0.022)	0.032*** (0.012)
HD Post 75-100%	0.202*** (0.036)	0.030 (0.024)
Constant	0.567*** (0.005)	0.601*** (0.010)
Observations	4,998	4,998
Tract FE	NO	YES
CD_Decade FE	YES	YES
Adj. R-squared	0.730	0.931

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Regression Results: Homeownership Rate

	(1)	(3)
HD Post 0-25%	0.008 (0.015)	0.087*** (0.023)
HD Post 25-75%	0.060*** (0.015)	0.119*** (0.023)
HD Post 75-100%	0.065*** (0.021)	0.119*** (0.040)
Constant	0.265*** (0.004)	0.256*** (0.016)
Observations	4,998	4,998
Tract FE	NO	YES
CD_Decade FE	YES	YES
Adj. R-squared	0.461	0.672

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Conclusions

- Historic designation appears to attract higher income, college-educated residents into communities
 - Good strategy for neighborhood revitalization?
- But risk of displacement: historic district designations appear to fuel neighborhood change



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