# Effects of Historic Designation on Residential Property Values



April 11, 2018

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#### Effects of Historic Designation on Property Values

- What are property values?
- The hedonic pricing method
- Burleith property tax assessments
- Studies of HD effects literature survey

Burleith(a) (excludes Hillandale)

#### **Property Values**

#### Market values: Sales comparables

- Fewer points
- Subjective

#### Tax assessments: DC online resource

- Lags market value
- Many points

#### Hedonic Property Value Pricing

#### hedonic

adjective he·don·ic \ hi- 'dä-nik \

#### **Definition of hedonic**

1 : of, relating to, or characterized by pleasure

2 : of, relating to, or characterized by hedonism

#### Hedonic Property Value Pricing

In Economics theory:

Hedonic: Estimating total value by breaking out each characteristic and evaluating contribution of each

#### The Hedonic Pricing Method

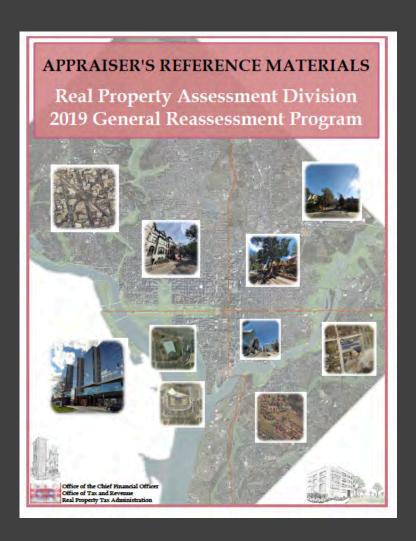
#### STEP 1: Gather Inputs

- Market survey selling prices
- lot size, number and size of rooms. . .
- property taxes, crime rates, quality of schools
- distances to work and shopping centers
- availability of public transportation
- environmental characteristics

#### The Hedonic Pricing Method

#### Step 2: regression analysis

- Statistically relate property values to property characteristics, including HD status.
- Find value of each characteristic.
- DC Tax Assessment is a hedonic process.



Real Property Assessment
Division
2019 General Reassessment
Program
Office of Tax and Revenue
Real Property Tax
Administration

### VISION GOVERNMENT SOLUTIONS CAMA – COMPUTER ASSISTED MASS APPRAISAL



Very simplistically

Market Value = land value + building RCN - depreciation

RNC = "Replacement Cost New"

Burleith(a) [not Hillandale]

Land Value = \$252.24 / sq ft

Base lot = 2000 sq ft = \$504,480

#### Replacement Cost New

```
Building RCN($) = [ ( Base Rate x Effective Area ) 
+ $ "Good Features" 
- $ "Bad Features" ]
```

multiplied by Fudge Factors

Building RCN =  $[(Base Rate + \sum ABRV) * Effective Area * SizeAdjustment + <math>\sum AFRV ] * (MV0 * MV2 * ... * MVn)$ 

- RCN = Replacement Cost New
- Base Rate = rate based on use code
- ABRV = Additive Base Rate Variables
- Effective Area = Adjusted area of improvement
- Size Adjustment = Adjustment factor to base size
- AFRV = Additive Flat Rate Variables
- MV = Multiplicative Variables

Building Base Rate
Derived from market analysis
Varies with type of home:

```
• Row $145.92 / sq ft. (2019)
```

- Detached \$161.27
- Semi-detached \$148.50

Building RCN =  $[(Base Rate + \sum ABRV) * Effective Area * SizeAdjustment + \sum AFRV] * (MV0 * MV2 * ... * MVn)$ 

#### Additive Base Rate Variables

• Hardwood floors + \$7.17 / sq. ft.

• Clay tile roof + \$2.93 / sq. ft.

• Elec base board heat - \$0.20 / sq. ft.

• Finished basement + \$20.00 / sq. ft.

... more...

#### Additive Flat Rate Variables

• Full bath (over 1) \$12,500

• Half bath \$ 7,750

• Fireplace \$8,000

• Kitchen \$11,500

```
Building RCN = [(Base Rate + \Sigma ABRV) * Effective Area * SizeAdjustment + \Sigma AFRV ] * (MV0 * MV2 * ... * MVn)
```

**Effective** area = Adjusted area of improvement

Effective area = Living space assessed @ 100%

- + Garage space @ 45%
- + Unfinished basement @ 25%
- + more...

Building RCN =  $\overline{[(Base Rate + \sum ABRVn) * Effective Area * SizeAdjustment + \sum AFRVn] * (MV0 * MV2 * ... * MVn)$ 

- SizeAdjustment: compare to 1,800 sq ft
- If smaller, increase rate / sq ft
- If larger, decrease rate / sq ft
- i.e. big houses worth less per sq ft!!

#### Depreciation:

Market Value = building RCN
- depreciation
+ land value

At effective age 75-yr house depreciates 16%

Effective age decreases with each renovation

Building RCN =  $[(Base Rate + \sum ABRVn) * Effective Area * SizeAdjustment + \sum AFRVn] * (MV0 * MV2 * ... * MVn)$ 

- MV = Multiplicative Variables:
   Grade, Renovation, Condition, Location...
- MV can be largest factors in value variations!

#### Depreciation:

At effective age 75-yr house depreciates 16%

Effective age decreases with each renovation

#### **Example Effective Age Adjustments**

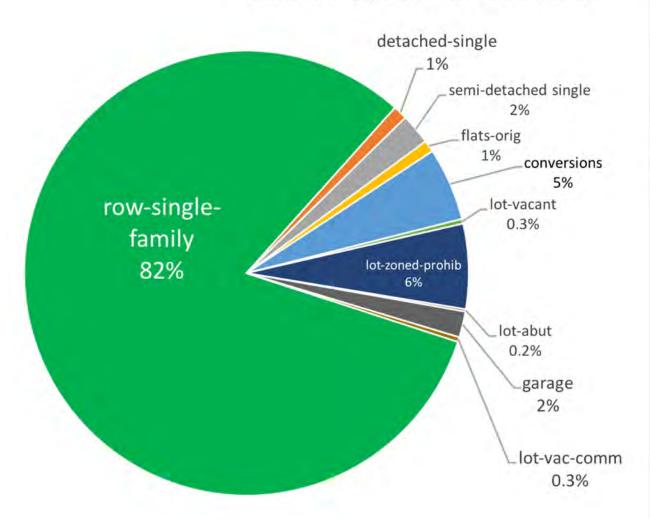
- New Kitchen = 90% x Age
- Effective Age = Actual Age x 0.9
   Actual 80 yrs x 0.9 = 72 yrs

Building RCN =  $[(Base Rate + \sum ABRVn) * Effective Area * SizeAdjustment + \sum AFRVn] * (MV0 * MV2 * ... * MVn)$ 

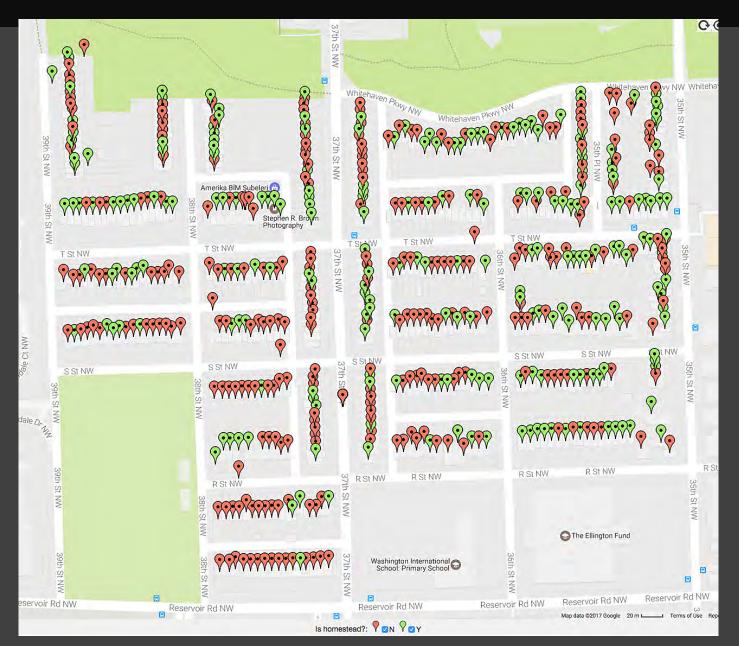
Example: Building Grade		Multiplier	
1	Low Quality	0.50	<- half value
2	Fair Quality	0.75	
3	Average Quality	1.00	
4	Above Average Quality	1.07	
5	Good Quality	1.16	
6	Very Good Quality	1.29	
7	Excellent Quality	1.46	
8	Superior Quality	1.66	
9	Extraordinary – A	1.96	
10	Extraordinary – B	2.20	
11	Extraordinary – C	2.55	
12	Extraordinary – D	2.90	<- 2.9 x value

#### 2017 look at 583 Burleith(a) properties





#### Burleith(a): 60.2% non-homesteads 39.8% homesteads



#### STUDIES OF EFFECTS OF HD STATUS

Survey of the literature: 25 HD reports (1971 – 2017) gleaned from the web

ON THE EFFECTS OF HISTORIC PRESERVATION
ON PROPERTY VALUES

RICHARD SCHMIDT

NOVEMBER, 2016

FOR THE BURLEITH CITIZENS ASSOCIATION

MORE EXTRACTS FROM THE LITERATURE

ON THE EFFECTS OF HISTORIC PRESERVATION

**ON PROPERTY VALUES** 

RICHARD SCHMIDT

**APRIL, 2018** 

FOR THE BURLEITH CITIZENS ASSOCIATION

www.burleith.org/historic-designation

## THE ECONOMIC IMPACT OF HISTORIC PRESERVATION IN PHILADELPHIA

Preservation Alliance for Greater Philadelphia 2010

**Source** 

#### **Conclusions**

- The majority of studies tend to conclude that HDs have a positive effect on property values.
- HD homes have higher average price increases

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HD homes have higher average price increases.

## BENEFITS OF RESIDENTIAL HISTORIC DISTRICT DESIGNATION FOR PROPERTY OWNERS

Jonathan Mabry, Ph.D. City of Tucson, June 2007

- HD property values appreciate significantly faster than the market as a whole in the vast majority of cases and appreciate at rates equivalent to the market in the worst case.
- Simply put—local historic districts enhance property values.

## BENEFITS OF RESIDENTIAL HISTORIC DISTRICT DESIGNATION FOR PROPERTY OWNERS

Jonathan Mabry, Ph.D. City of Tucson, June 2007

 Home investments in HDs will not be adversely affected by construction of an inappropriate, out-of-scale building next door.

### HISTORIC DESIGNATION AND RESIDENTIAL PROPERTY VALUES

Andrew Narwold, Jonathan Sandy, Charles Tu Center for Real Estate University of San Diego 2017

- Hedonic regression analysis San Diego.
- HD creates a 16% increase in housing value

Vicki Been, Ingrid Gould Ellen
New York University School of Law
Michael Gedal, Federal Reserve Bank of New York
Edward Glaeser, Harvard University Department of Economics
Brian J. McCabe, Georgetown University Department of Sociology
2014

- HD affects decisions about where to build.
- Less new construction takes place in HDs after they are designated.

Vicki Been, Ingrid Gould Ellen
New York University School of Law
Michael Gedal, Federal Reserve Bank of New York
Edward Glaeser, Harvard University Department of Economics
Brian J. McCabe, Georgetown University Department of Sociology
2014

• In areas where the value of the option to build unrestricted is higher, HD has a less positive effect on property values within the district.

Vicki Been, Ingrid Gould Ellen
New York University School of Law
Michael Gedal, Federal Reserve Bank of New York
Edward Glaeser, Harvard University Department of Economics
Brian J. McCabe, Georgetown University Department of Sociology
2014

 We would expect that HD would have a more negative effect on property values in higher value neighborhoods with a greater share of buildings built at heights well below the allowable limits.

Vicki Been, Ingrid Gould Ellen
New York University School of Law
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2014

Preservation districts will raise unit prices

if the initial aesthetic level of the area is higher than the typical level for new construction,

but will lower unit prices otherwise.

#### INCOME PROPERTY VALUATION

Kinnard, William Jr. Heath-Lexington Books, 1971

- HD may impede realization of a property's "highest best use." Instead, the property may have to be kept at its "current use."
- Current use is the existing utilization of a property; highest best use is the most profitable.

## THE ECONOMIC IMPACTS OF HISTORIC PRESERVATION IN ARKANSAS

Arkansas Historic Preservation Program [Undated]

- The issue of timing is key
- If HD takes place before the area has experienced significant rehabilitation and restoration, results will be very different than they would be if designation occurred when renovation was complete.

#### THE IMPACT OF LOCAL HISTORIC DESIGNATION

Akram M. Ijla Cleveland State University March, 2008

- As part of an HD a property's external appearance must meet certain standards and an individual property owner's options are therefore restrained and restricted.
- Therefore, owners of homes in historic district do experience a loss of their property rights and could even sustain economic losses . . .

#### THE IMPACT OF LOCAL HISTORIC DESIGNATION

#### Akram M. Ijla Cleveland State University March, 2008

Author/Year	Level of Historic Designation	Location	Research Method	Impact of Designation on Property Value
Ford (1989)	Federal & State	Baltimore, MD	Hedonic Regression	Positive (+)
Schaeffer and Ahern (1991)	Federal, State, and Local	Chicago, IL	Hedonic Regression	Negative (-)
Asabere and Huffman (1994a)	Federal & State	Philadelphia	Hedonic Regression	Positive (+)
Asabere and Huffman (1994b)	Federal & State	Philadelphia	Hedonic Regression	Negative (-)
Kilpatrick (1995)	Mixed	Columbia, South Carolina	Hedonic Regression	Positive (+)
Coulson and Leichenko (2001)	Mixed	Abilene, TX	Hedonic Regression	Positive (+)
Leichenko et al. (2001)	Mixed	Nine Texas	Hedonic Regression	Positive (+)
Heudorfer (1975)	Mixed	New York City	Case-control	Neutral (N)
Scribner (1976)	Federal & State	Alexandria, VA	Case-control	Positive (+)
Rackham (1977)	Federal & State	Washington, DC	Case-control	Positive (+)
New York Landmarks Conservancy (1977)		New York City	Case-control	Neutral (N)
US Advisory Panel on Historic Preservation (1979)	Federal & State	Alexandria, VA; Galveston, TX; Savannah, GA; Seattle, WA	Case-control	Positive (+)
Cohen (1980)		Six Chicago historic districts	Case-control	Positive (+)
Samuels (1981)	Federal & State	Washington, DC	Case-control	Neutral (N)
Gale (1991)	Federal & State	Washington, DC	Case-control	Neutral (N)

#### HISTORIC PRESERVATION: PRESERVING VALUE?

Martin D. Heintzelman, Jason J. Altieri School of Business, Clarkson University April, 2011

- The act of HD actually reduces value by 11.6% to 15.5%.
- Regulation would be expected to reduce home values if it prevents optimal development from happening.

### THE POSITIVE EXTERNALITIES OF HISTORIC DISTRICT DESIGNATION

Ana Maria Romero
Illinois Wesleyan University
2004

 Some of the evidence suggests that there are no benefits to HD designation and, in some cases, the restrictive policies of the designation actually lessen property values.

## THE POSITIVE EXTERNALITIES OF HISTORIC DISTRICT DESIGNATION

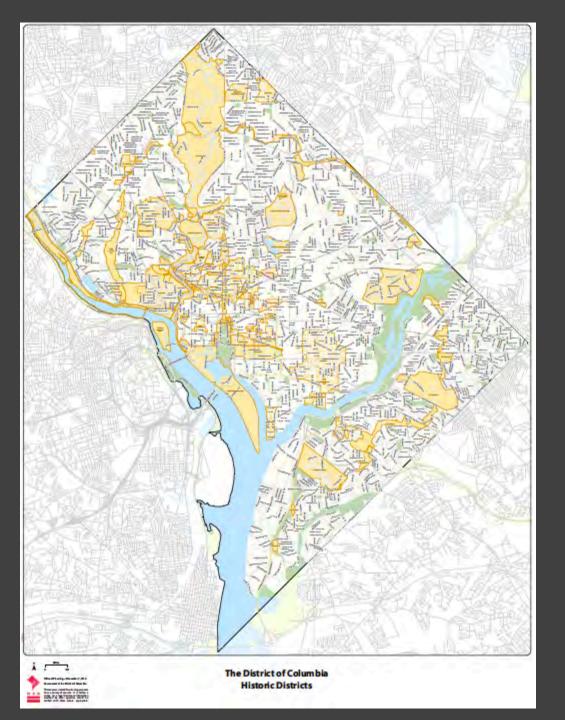
Ana Maria Romero Illinois Wesleyan University 2004

 It can be argued that HD is a powerful tool only if it is designed to meet the individual and unique needs of the area in question.

### HISTORIC PRESERVATION AND ITS EVEN LESS AUTHENTIC ALTERNATIVE

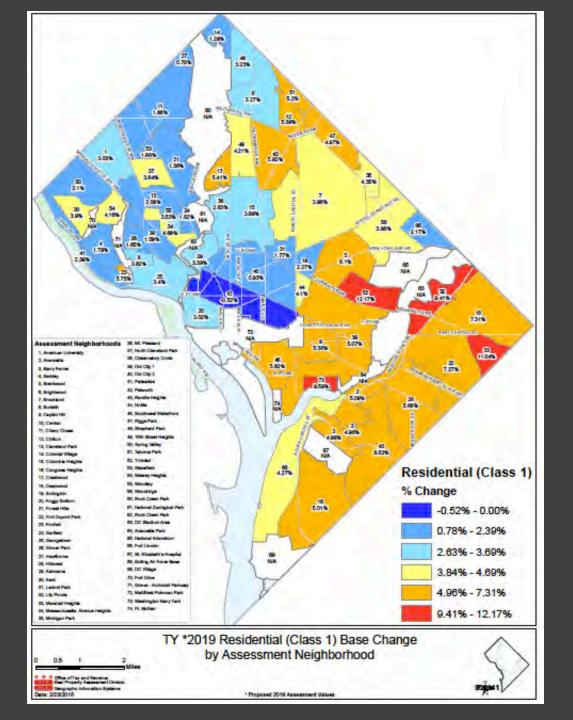
Lior Jacob Strahilevitz
Wharton School, University of Pennsylvania
2017

- In areas of significant land scarcity... there is little credible evidence that historic preservation regulations systematically enhance property values.
- Most of the rigorous evidence in fact suggests that such regulations cause property values to decline.



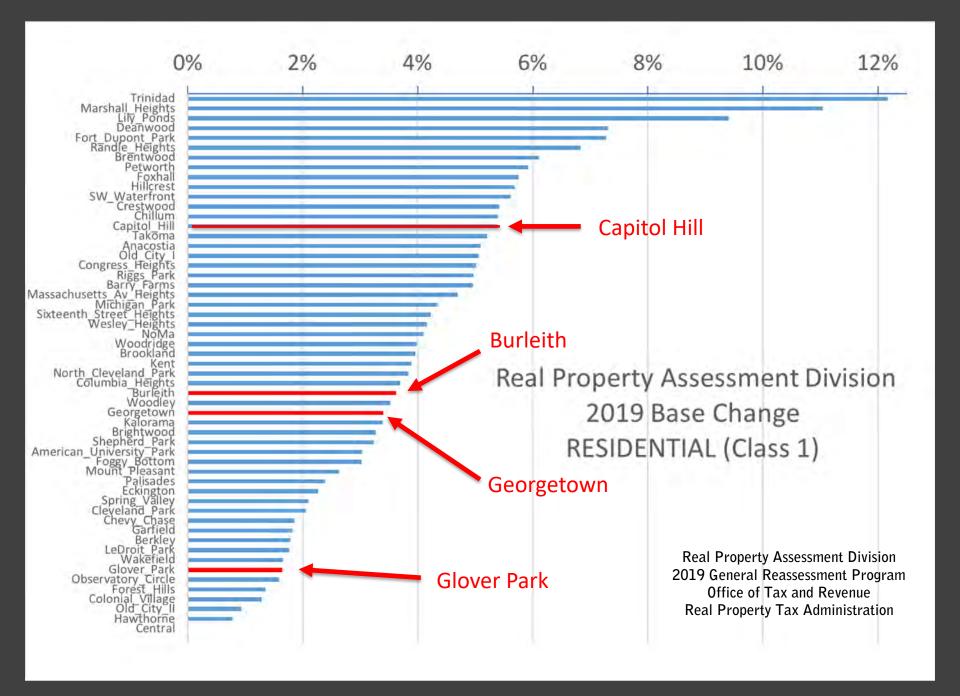
DC HD Neighborhoods 2014

Office of Planning DC Historic Districts Map 2014



## 2019 Base Changes

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Real Property Tax
Administration



#### For more information:

#### www.burleith.org/historic-designation



