Houston Market Value Analysis

November 2nd, 2022

About Reinvestment Fund

- We are a national mission-driven financial institution that creates opportunity for underserved people and places through partnerships. We marshal the capital, analytics, and expertise necessary to build strong, healthy, and more equitable communities.

- Since 1985, Reinvestment Fund has made $2.7 billion in cumulative investments and loans.

- We are supported by 830 investors that include individuals, foundations, religious institutions, financial institutions, civic organizations and government.

How we work:

Lending & Investing

Capacity Building & Capital Access Programs

Policy Solutions
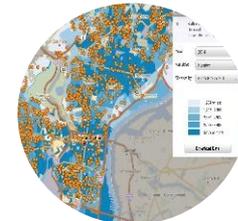
PolicyMap

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Road Map

I. The Market Value Analysis

II. Houston's 2022 MVA
    I. Market Characteristics
    II. Population by Market Type

III. EDI Analysis

IV. Factors Influencing Market Development
    I.   Mortgage Credit
    II. Flood Risk
    III. Vacant Land
    IV. Housing Affordability

V. Displacement Risk and Housing Markets

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Market Value Analysis Methodology

The Market Value Analysis

The **Market Value Analysis** (MVA) is a tool to help residents and policymakers identify and understand the elements of their local real estate markets. It is an objective, data-driven tool built on local administrative data and validated with local experts.

With an MVA, public officials and private actors can more precisely target intervention strategies in weak markets and support sustainable growth in stronger markets.
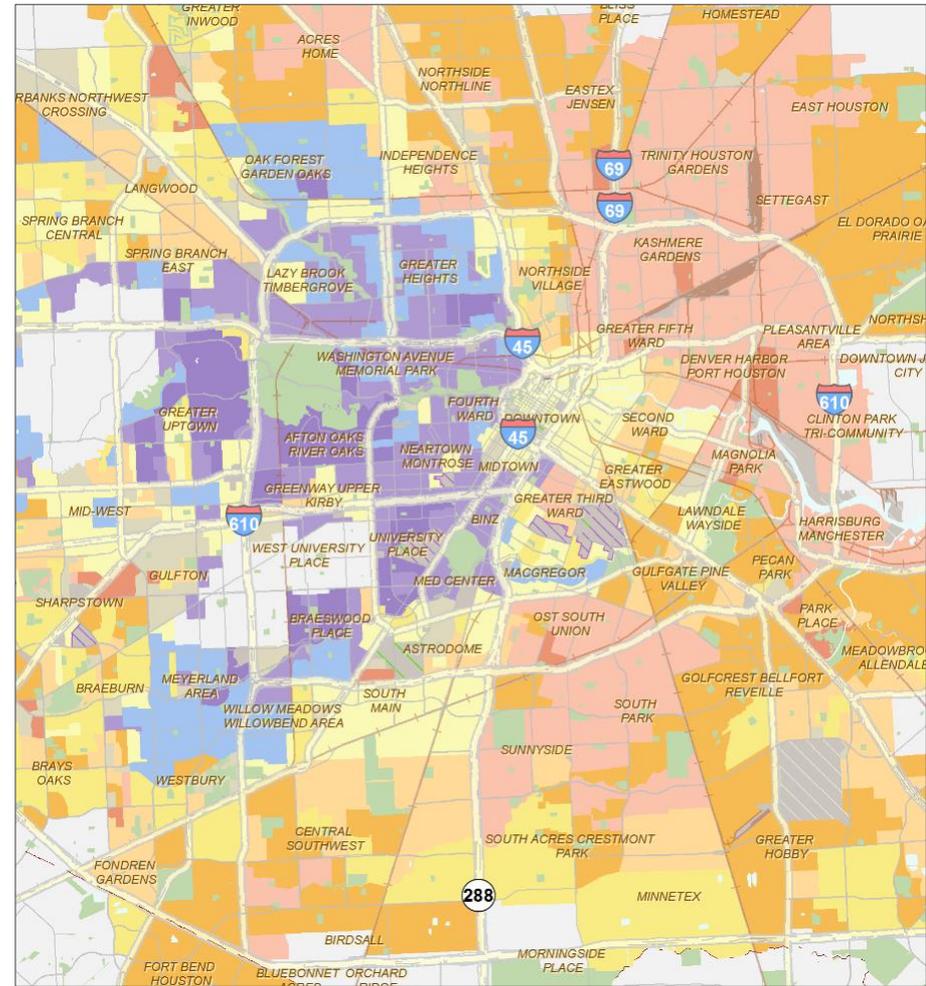
Our Normative Assumptions

When analyzing markets we begin with these principles:

- Public **subsidy is scarce**; acting alone, subsidies cannot create a market

- Public policy and subsidy must **leverage private investment** or create conditions for investment to occur

- In distressed markets, **build from strength** by investing near strong assets

- All **residents are customers** with an expectation of quality public services and amenities

- The best decisions are based on the sound and **objective analysis** of quantitative and qualitative data

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Who is Using the MVA

MVAs have been funded by government agencies, local foundations, and financial institutions in cities and counties around the country:

Allegheny County, PA	Irving, TX	Philadelphia, PA
Asbury Park, NJ	Jacksonville, FL	Pittsburgh, PA
Atlantic City Area, NJ	Kansas City, MO	Prince George's County, MD
Baltimore, MD	Milwaukee, WI	Reading Area, PA
Bethlehem, PA	Mt. Vernon, NY	Richmond, VA
Camden, NJ	Nashville, TN	San Antonio, TX
Dallas, TX	New Jersey (8 regions)	Selma, AL
Denton, TX	New Orleans, LA	St Louis, MO
Detroit, MI	Newark, NJ	State of Delaware
Houston, TX	Northampton County, PA	Washington, DC
Indianapolis, IN	Paterson, NJ	Wilmington, DE

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MVAs in Action: How Cities Use the MVA

- Component of a local land banking strategy (Phila., NOLA, Pittsburgh, Wilmington)
- Guide capital budget (Detroit)
- Focus code enforcement (Phila., Baltimore, Indianapolis, NOLA)
- Benchmark quality of life measures (Phila.)
- Equitable development strategy (DE/DSHA)
- Target statewide Strong Neighborhoods Revolving Loan Fund (DE/DSHA)
- Inform LIHTC QAP (DE/DSHA)
- Develop CDBG ConPlan / Comprehensive plan (Detroit, Wilmington, St. Louis, Richmond, Dallas)
- Assessment of Fair Housing (Phila., Richmond)
- Assess changes in the market over time (Phila., Baltimore, Pittsburgh)
- Evaluate development opportunities (Pittsburgh, Phila., Houston, Detroit, St. Louis, cities in NJ)
- Target demolition and acquisition activities (Baltimore, Phila., Detroit, NOLA)
- Select transformative tipping point projects (Phila., Baltimore, Pittsburgh, NOLA)
- Engage partners – philanthropic, non-profit, government – in coordinated efforts to rebuild neighborhoods (Baltimore, Milwaukee, NOLA)
- Guide federal Neighborhood Stabilization Program Investment (States of PA & NJ, Houston, Detroit)

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The MVA Process

1 Acquire **local administrative data** and geocode to Census block group geographies.

2 Manually inspect and **validate data layers** by driving the area.

3 Use statistical **cluster analysis** to identify areas with common attributes.

Iterative

4 Manually inspect areas for conformity with **local experts** to assess fit

5 Alter parameters; **re-solve and re-inspect** until model accurately represents area

6 Summarize and describe the characteristics of each market

Lessons from 15+ years of experience

Validating Data is Critical.

Researchers must systematically visit and observe neighborhoods in the city to understand the data and final model.

Geographic Scale Matters.

MSA and Census tract geographies are too large to accurately reflect the nuances of local real estate markets.

One Size Does Not Fit All.

MVA components and models share some similarities across cities but must be customized to the unique traits of each city.

Integrate Local Knowledge.

All models are tested with local experts to incorporate qualitative feedback from each geography.

Observations from our Validation Trips

Our validation trips in June, August, and October were intended to confirm the accuracy of our underlying data, identify market characteristics or indicators that should inform the new MVA model, and validate the final model.

Validation Driving Route

Legend:
- Validation Trip #1 (6/23 – 6/25)
- Validation Trip #2 (8/23 – 8/25)
- Validation Trip #3 (10/25 – 10/27)

Observations from Three Validation Trips

- **Substantial Appreciation.** Across markets, conditions show improvement from 2018.

- **Housing Vacancy.** New vacancy measures were overly sensitive.

- **Construction and Renovation.** We observed substantial construction *and renovation* across middle and stronger markets.

- **All Renter Markets.** Some unclassified areas contained large rental complexes that needed to be coded manually.

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Houston's 2022 Market Value Analysis

A Brief History of MVAs in Houston

MVA 2022

MVA 2016

MVA 2013
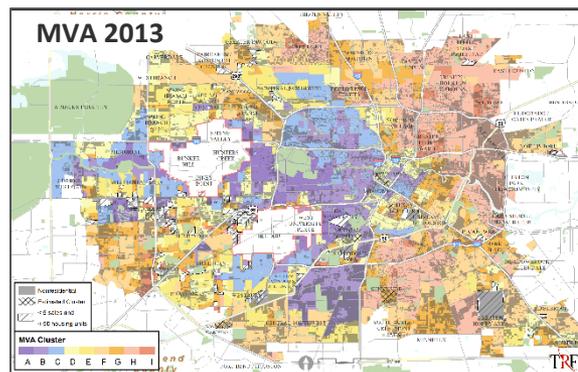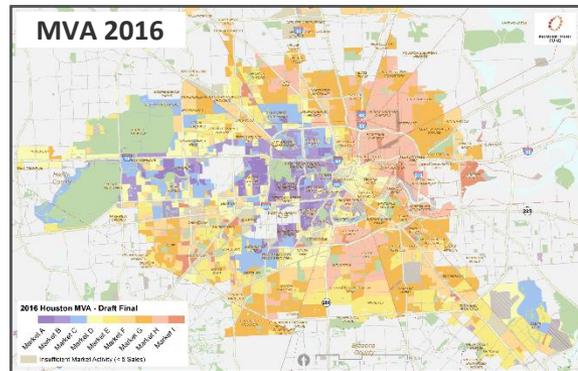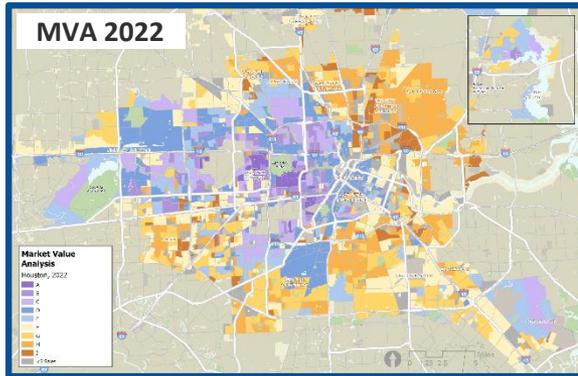
The 2022 MVA is the third Market Value Analysis completed in Houston. Each MVA has followed the same general template, with a few modifications each year to improve accuracy and utility:

- Similar number of categories each year

- Similar inputs each year

- New in 2016: Expanded study area to include entire Houston city limits

- New in 2022: Modified variables to reflect pandemic impacts

- New in 2022: Modified color scale to reflect market improvement

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Housing Market Indicators

|			
Property Value and Investment	Median Home Sales Price	Median price of homes sold, 2020-2022	*Purchased records from Data Axle*
	Home Price Variance	Coefficient of Variance of home prices, 2020-2022	*Purchased records from Data Axle*
	New Construction	Permits for single- and multi-family construction, 2020-2022	*Department of Planning and Development*
	Renovation Permits*	Permits for single- and multi-family renovation, 2020-2022	*Department of Planning and Development*
Blight, Distress, and Vacancy	Foreclosure Filings	Foreclosure filings as a share of homeowners, 2018 – 2022	*Constables' Foreclosure Auction Daily Court Review Records*
	Housing Vacancy*	Homes with signs of vacancy (low water usage, water shut offs, demolished buildings, dangerous buildings, code violation), 2022	*Department of Planning and Development, Department of Neighborhoods, Houston Water*
Housing Stock and Land Use	Owner Occupancy	Owner Occupied Homes, 2015 – 2019	*American Community Survey, Five-Year Estimate*
	Subsidized Housing	Units in LIHTC, HCV, and HHA housing as a share of households (excluding elderly developments), 2022	*Houston Housing Authority*
	Land Use	Commercial and industrial land as a share of land area, 2016	*Houston-Galveston Area Council*

*Indicator is new or modified from 2016 MVA

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Market Value Analysis (2022)

Market Value Analysis — Houston, 2022
- A
- B
- C
- D
- E
- F
- G
- H
- I
- <5 Sales
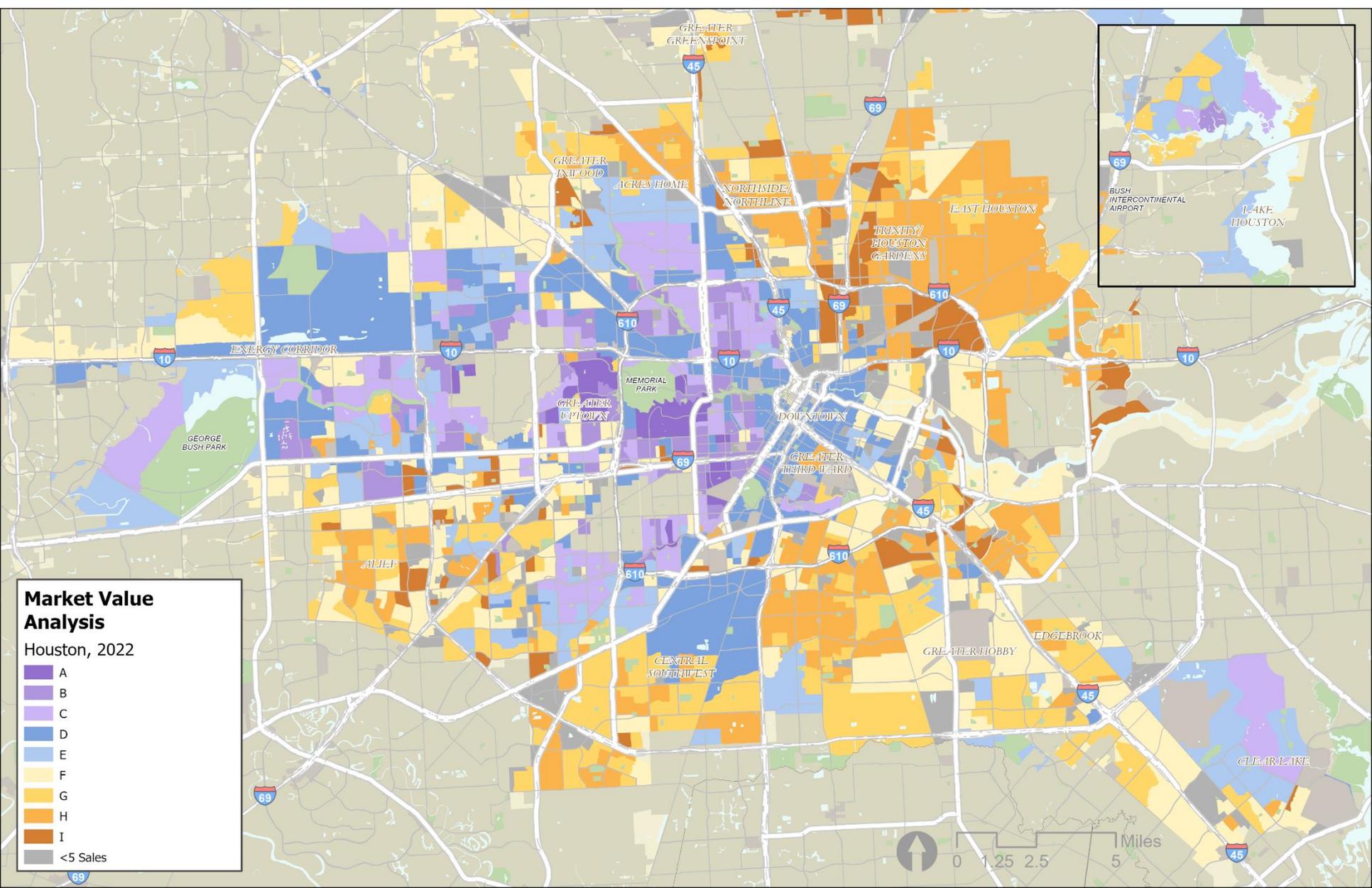
Market Characteristics

Average Market Indicators by MVA (2022) Market Types

	N =	Median Home Price, 2020-22	Coeff. Var, 2020-22	Pct Home-Owners	New Construction, 2020-22	Home Renovation, 2020-22	Fcl Per 100 Home-Owners	Pct Vacant Buildings, 2022	Subsidized Households	Com/Inds Land Area
A	21	$1,346,786	0.61	84%	3%	10%	0.00	3%	0%	7%
B	81	$549,250	0.51	37%	5%	3%	0.03	1%	1%	24%
C	121	$497,271	0.43	84%	5%	9%	0.04	2%	0%	14%
D	148	$336,281	0.40	34%	11%	3%	0.26	2%	5%	38%
E	148	$279,810	0.43	77%	2%	6%	0.22	2%	1%	12%
F	241	$189,985	0.39	36%	3%	2%	0.59	1%	6%	41%
G	228	$168,083	0.39	77%	3%	4%	0.45	2%	2%	15%
H	187	$130,604	0.50	49%	4%	4%	2.08	4%	6%	19%
I	68	$86,934	0.57	32%	1%	2%	1.32	2%	6%	39%
City	1,400	$278,298	0.44	48%	4%	4%	0.64	2%	4%	27%

*Averages exclude values from estimated block groups

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Market Definitions Over Time

Improvements across the city's housing markets led us to modify our color scheme for this year's MVA

2013 MVA

	Median Prices, 10 - 11
A	$571k
B	$315k
C	$273k
D	$147k
E	$146k
F	$82k
G	$79k
H	$50k
I	$27k

2016 MVA

	Median Prices, 14 - 15
A	$715k
B	$412k
C	$337k
D	$219k
E	$149k
F	$104k
G	$86k
H	$53k
I	$33k

2022 MVA

	Median Prices, 20 - 22
A	$1,347k
B	$549k
C	$497k
D	$336k
E	$280k
F	$180k
G	$168k
H	$131k
I	$87k

Indicator Changes Over Time

Code Violations and Water Shutoffs Were Not Helpful Indicators for the 2022 MVA

Count of Code Violation Records, 2014 to 2022

Count of Water Shutoff Records, 2014 to 2022
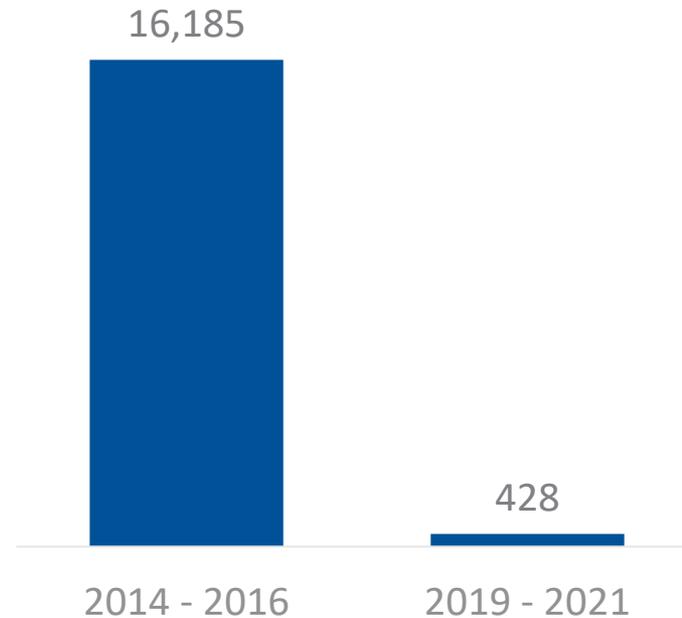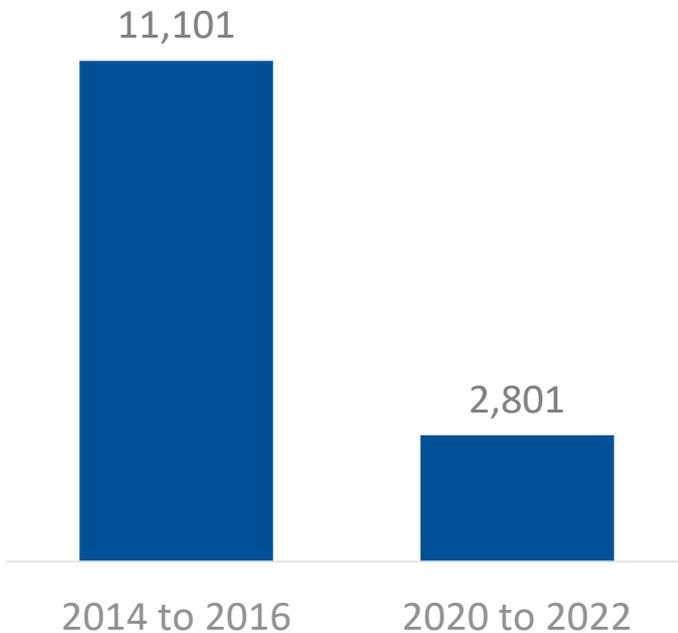
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Houston Market Categories

Purple Markets

|	N =	Median Home Price, 2020-22	Coeff. Var, 2020-22	Pct Home-Owners	New Constr, 2020-22	Home Reno, 2020-22	Fcl Per 100 Homes	Pct Vacant Bld, 2022	Subsidized Households	Com/Inds Land Area
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Purple Markets
Houston, 2022
A
B
C
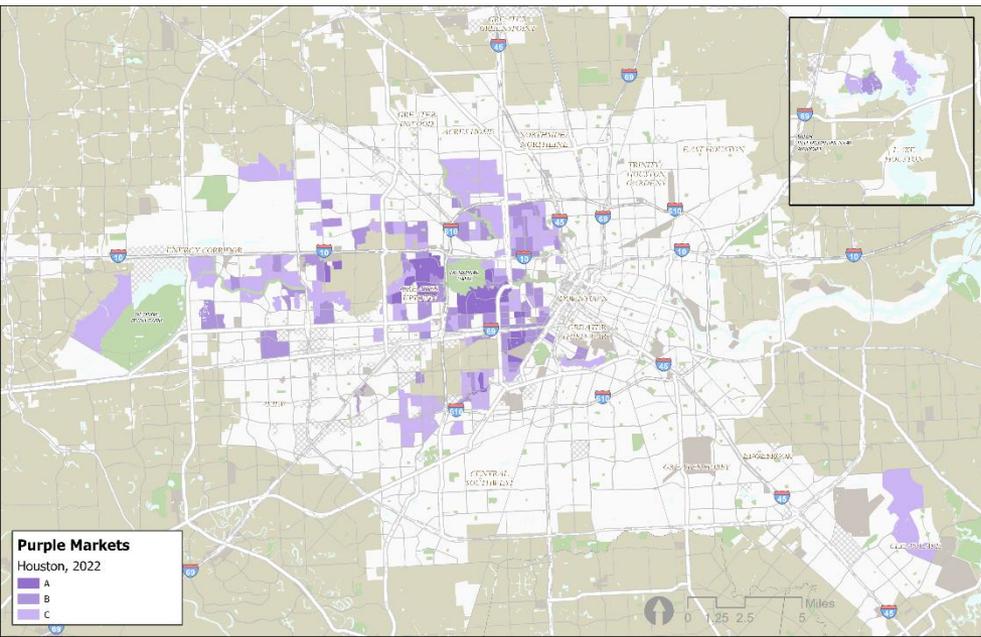
Market Characteristics

- Highest priced neighborhoods with predominantly residential land uses

- Substantial renovation activity, with some new construction

- "B" Markets contain more mixed use and rental properties

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Blue Markets

	N =	Median Home Price, 2020-22	Coeff. Var, 2020-22	Pct Home-Owners	New Constr, 2020-22	Home Reno, 2020-22	Fcl Per 100 Homes	Pct Vacant Bld, 2022	Subsidized Households	Com/Inds Land Area
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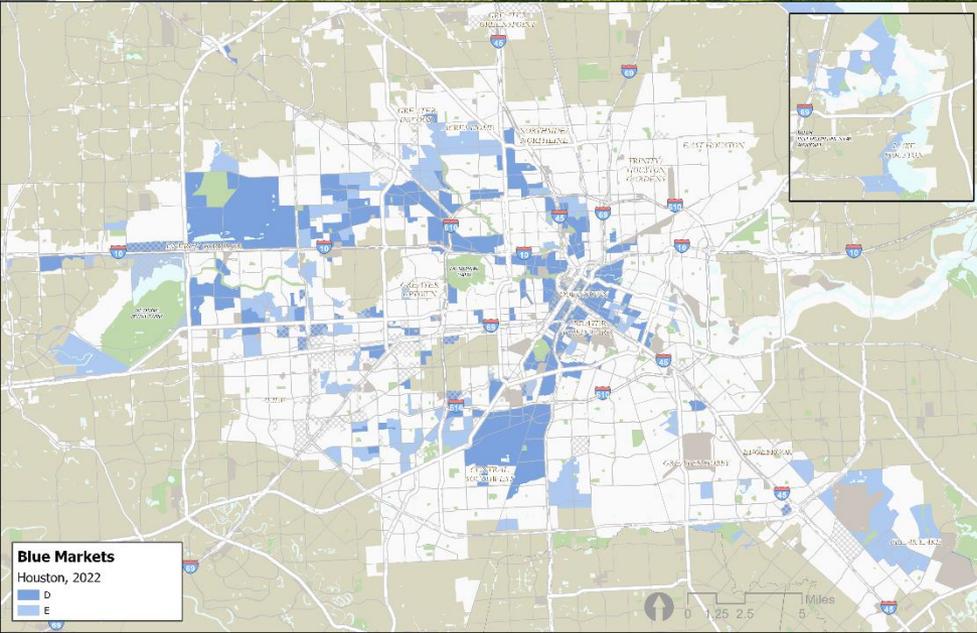
Market Characteristics

- Moderate prices, with mix of owners and renters

- Renter markets ("D") experiencing substantial new townhome construction

- Homeowner markets ("E") are well maintained older homes, with moderate renovation activity

- Minimal vacancy and foreclosure activity

Blue Markets
Houston, 2022
D
E

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Yellow Markets

	N =	Median Home Price, 2020-22	Coeff. Var, 2020-22	Pct Home-Owners	New Constr, 2020-22	Home Reno, 2020-22	Fcl Per 100 Homes	Pct Vacant Bld, 2022	Subsidized Households	Com/Inds Land Area
F	241	$189,985	0.39	36%	3%	2%	0.59	1%	6%	41%
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Yellow Markets
Houston, 2022
F
G
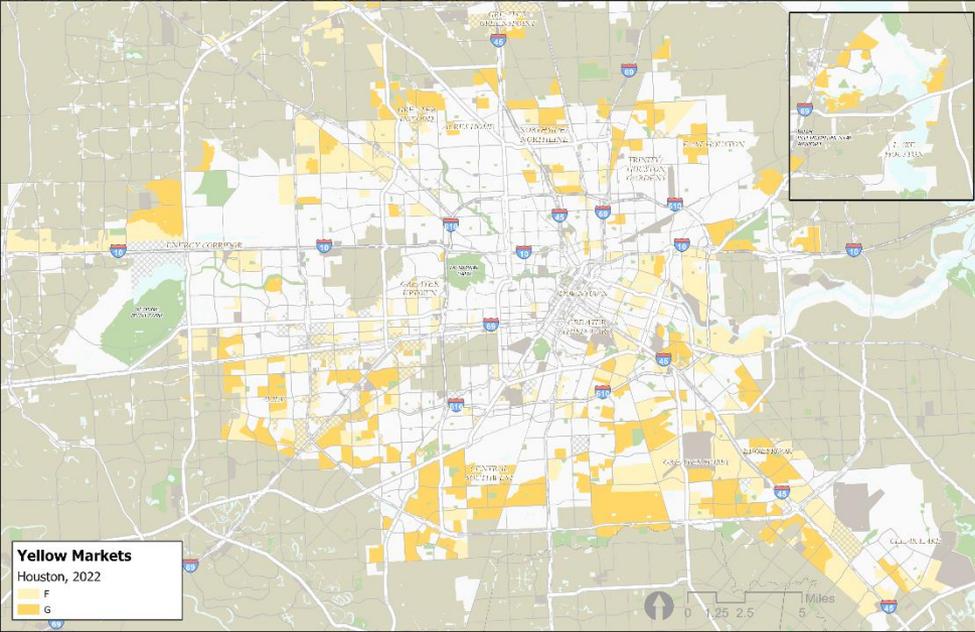
Market Characteristics

- Noticeably lower development activity

- Properties have higher level of deferred maintenance, and elevated foreclosure activity

- City's highest non-residential land use in "F" markets

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Orange Markets

N =	Median Home Price, 2020-22	Coeff. Var, 2020-22	Pct Home-Owners	New Constr, 2020-22	Home Reno, 2020-22	Fcl Per 100 Homes	Pct Vacant Bld, 2022	Subsidized Households	Com/Inds Land Area
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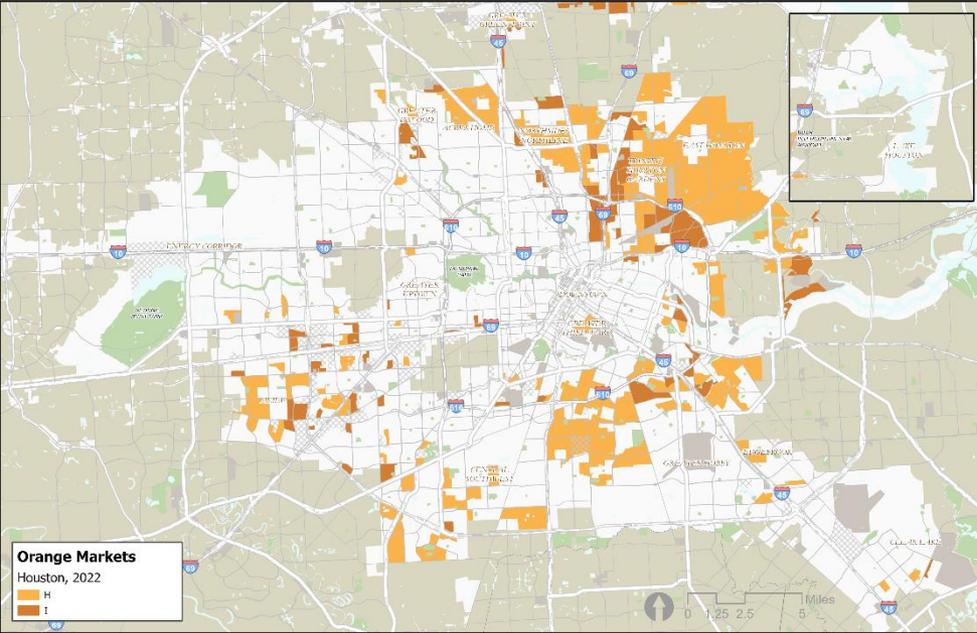
Market Characteristics

- Lowest home prices, and noticeable vacant buildings and undeveloped parcels

- Less neighborhood infrastructure (e.g., sidewalks, drains)

- Fewer home sales and realtor activity with highest foreclosure rates

- Above average non-residential land use and subsidy use

Orange Markets
Houston, 2022

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Complete Communities

Legend:

Complete Communities

Market Value Analysis

Houston, 2022

- A
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- <5 Sales
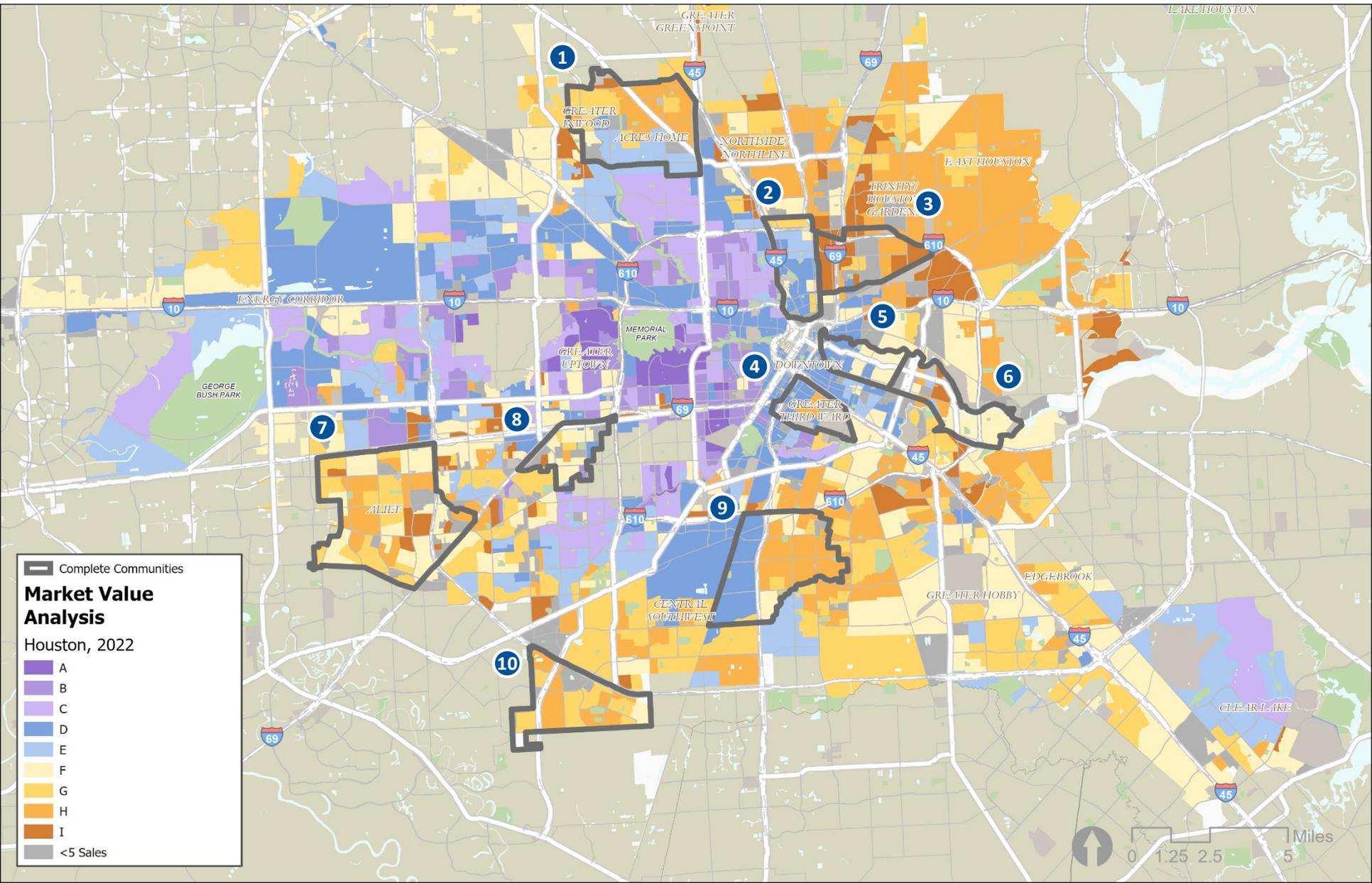
1) Acres Homes

1) Acres Homes

MVA 2022
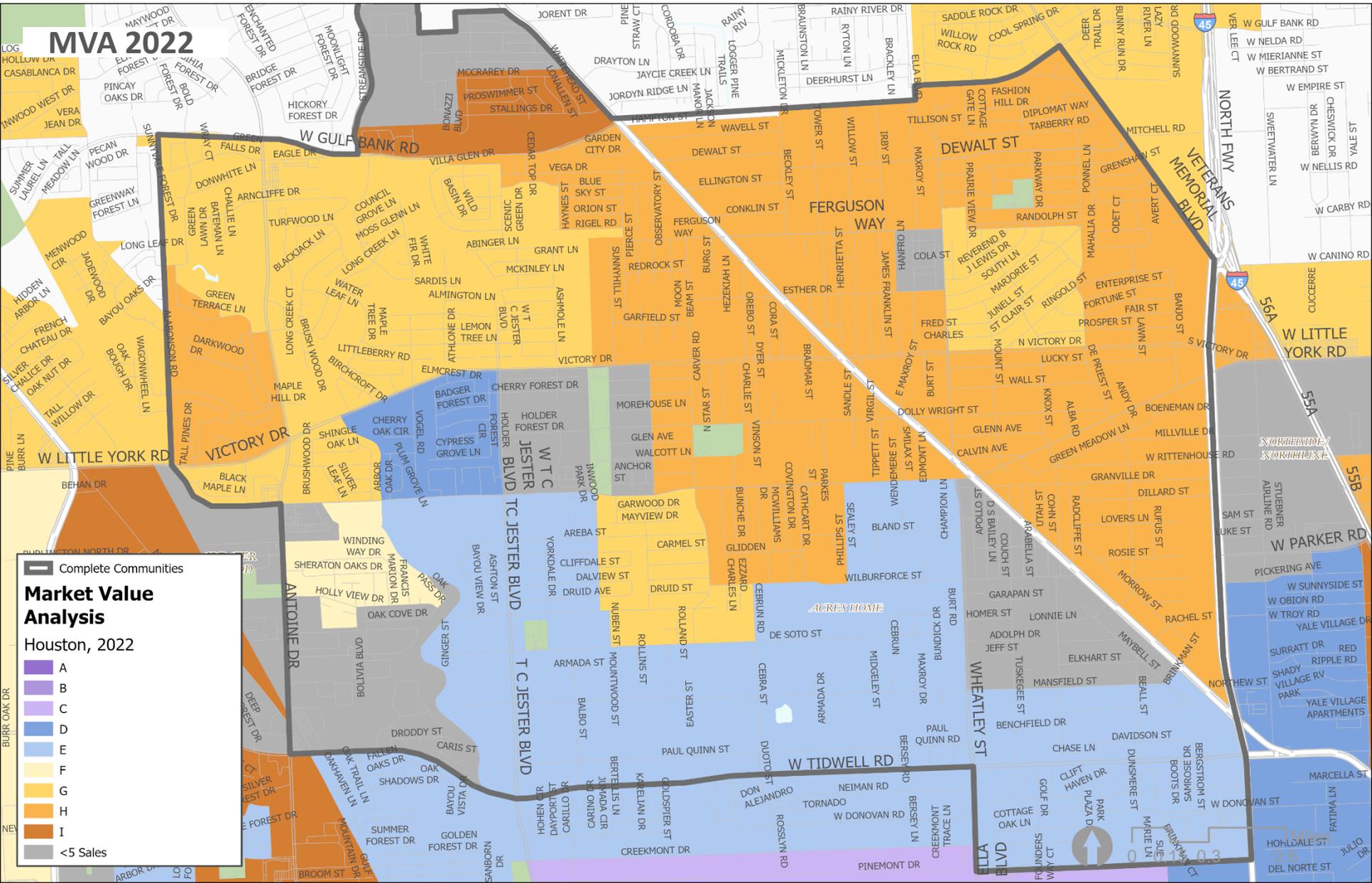
Market Value Analysis

Houston, 2022

Complete Communities

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- <5 Sales

1) Acres Homes

MVA 2022

Improved MVA Since 2016

Declined MVA Since 2016

Complete Communities

Market Value Analysis
Houston, 2022

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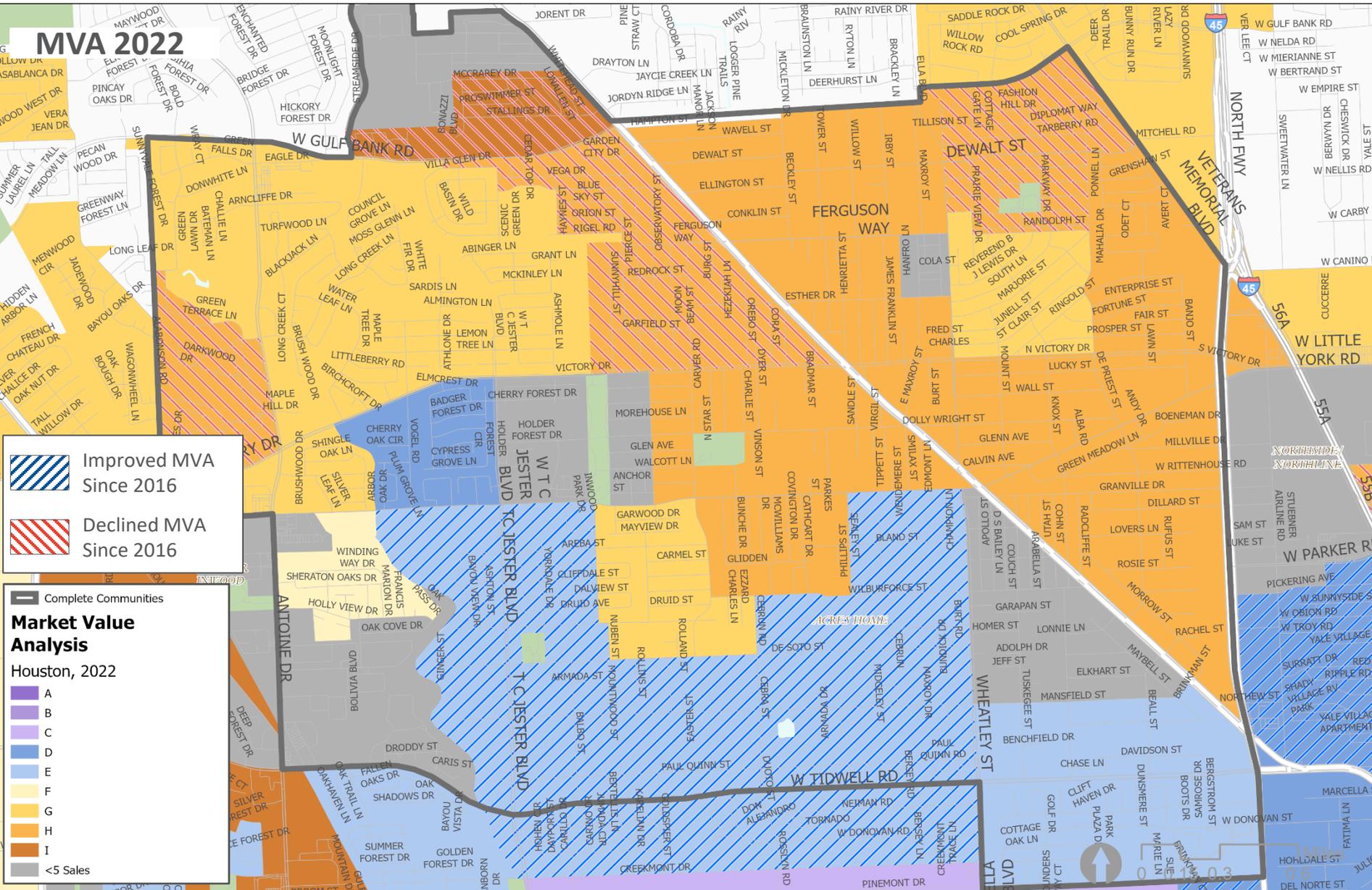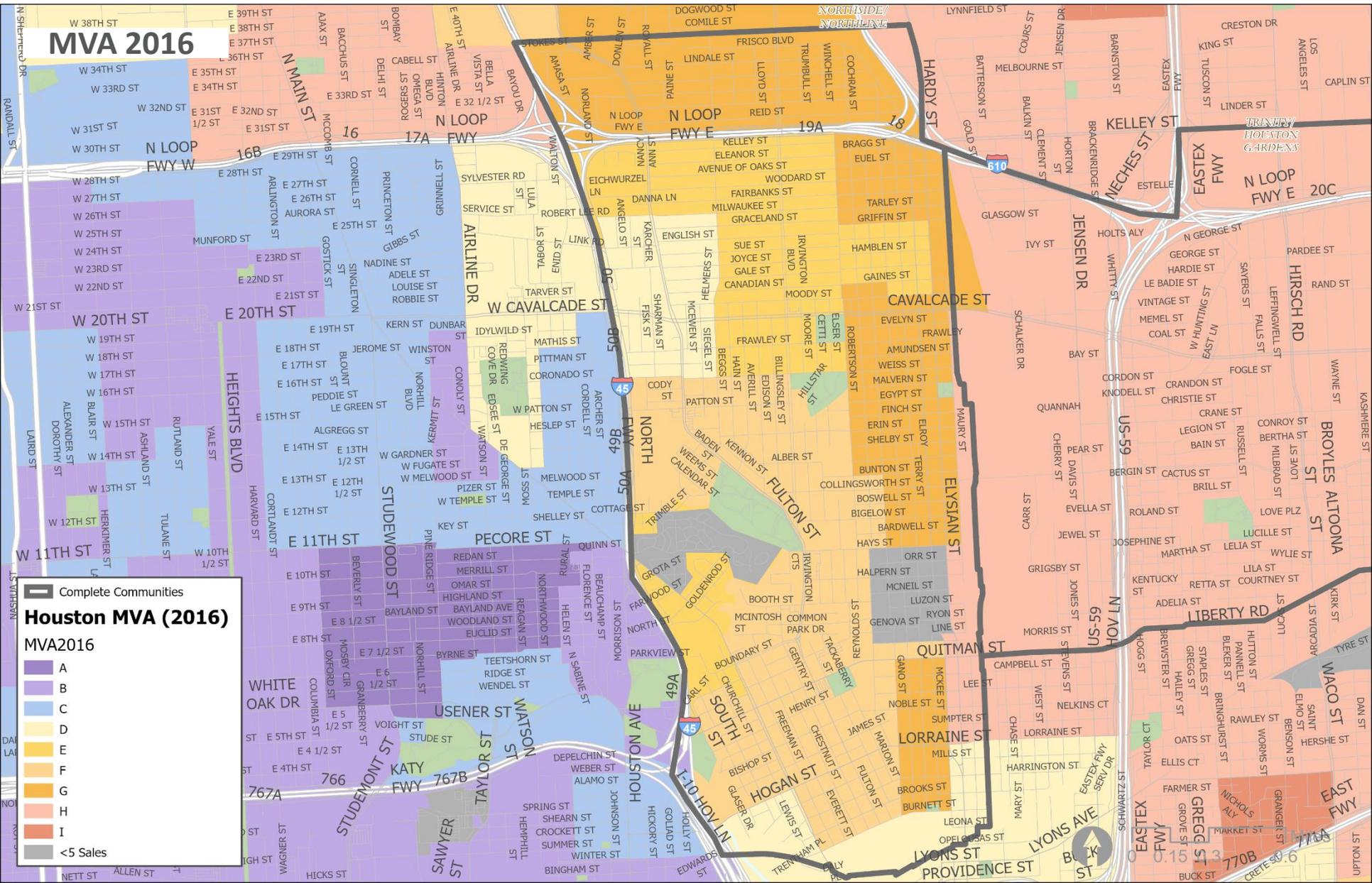
2) Near Northside

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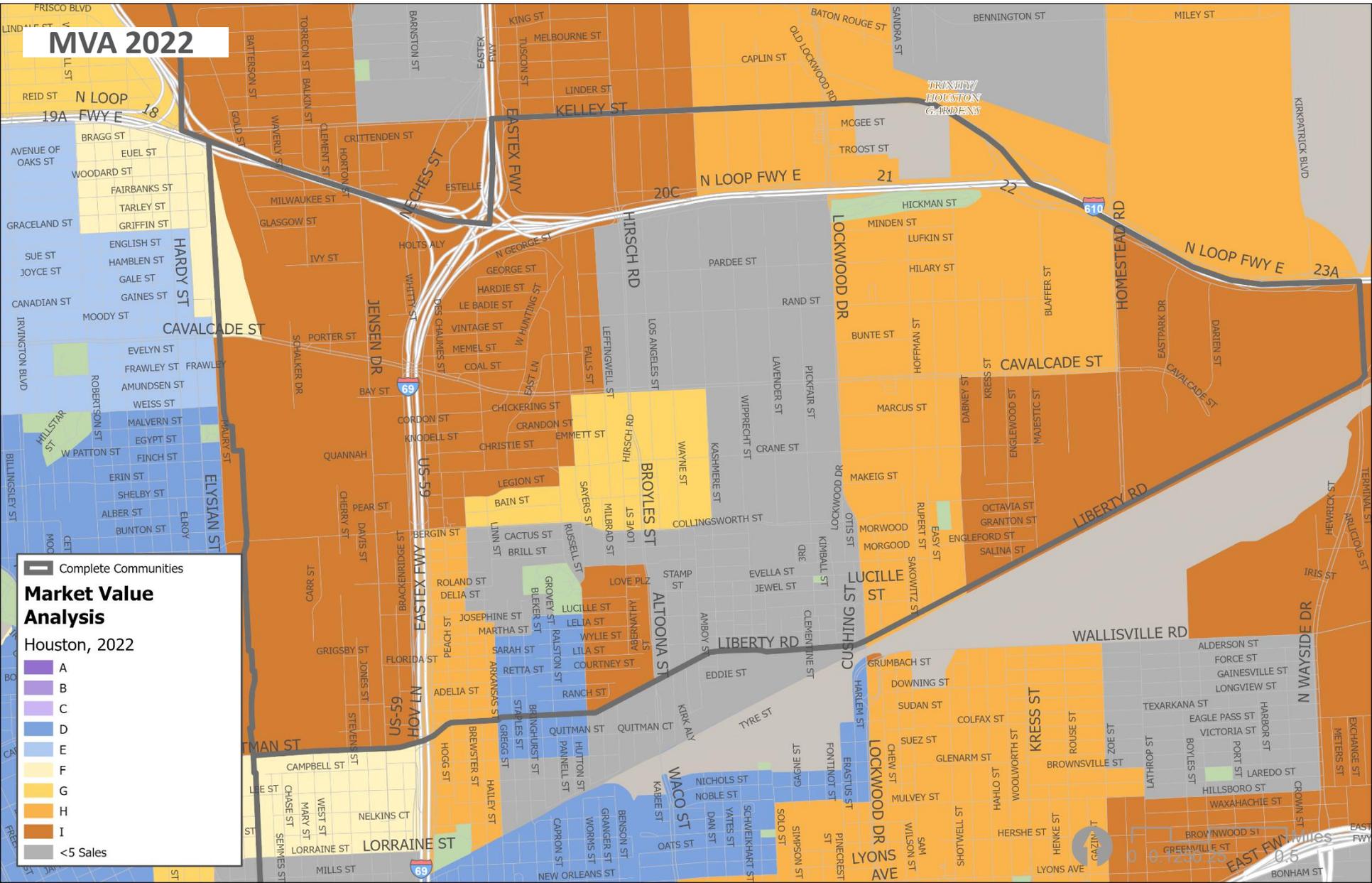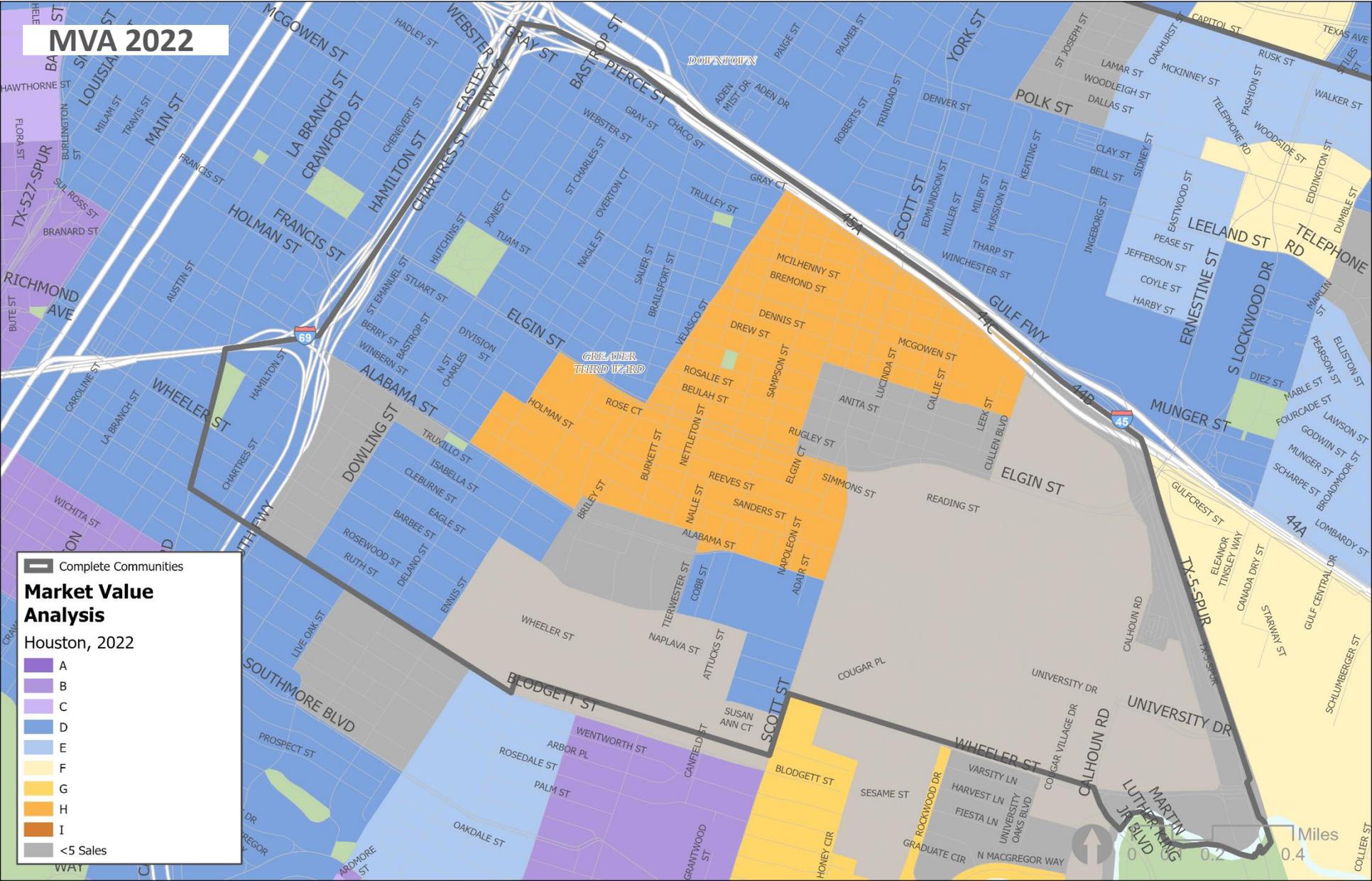
MVA 2022

Market Value Analysis
Houston, 2022

Complete Communities

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<5 Sales

2) Near Northside

MVA 2022

Market Value Analysis
Houston, 2022

A
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<5 Sales

Improved MVA Since 2016
Declined MVA Since 2016
Complete Communities

3) Kashmere Gardens

MVA 2022

Complete Communities

Market Value Analysis

Houston, 2022

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- <5 Sales

4) Third Ward

MVA 2022

Market Value Analysis
Houston, 2022

Legend:
- Complete Communities
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- <5 Sales

5) Second Ward
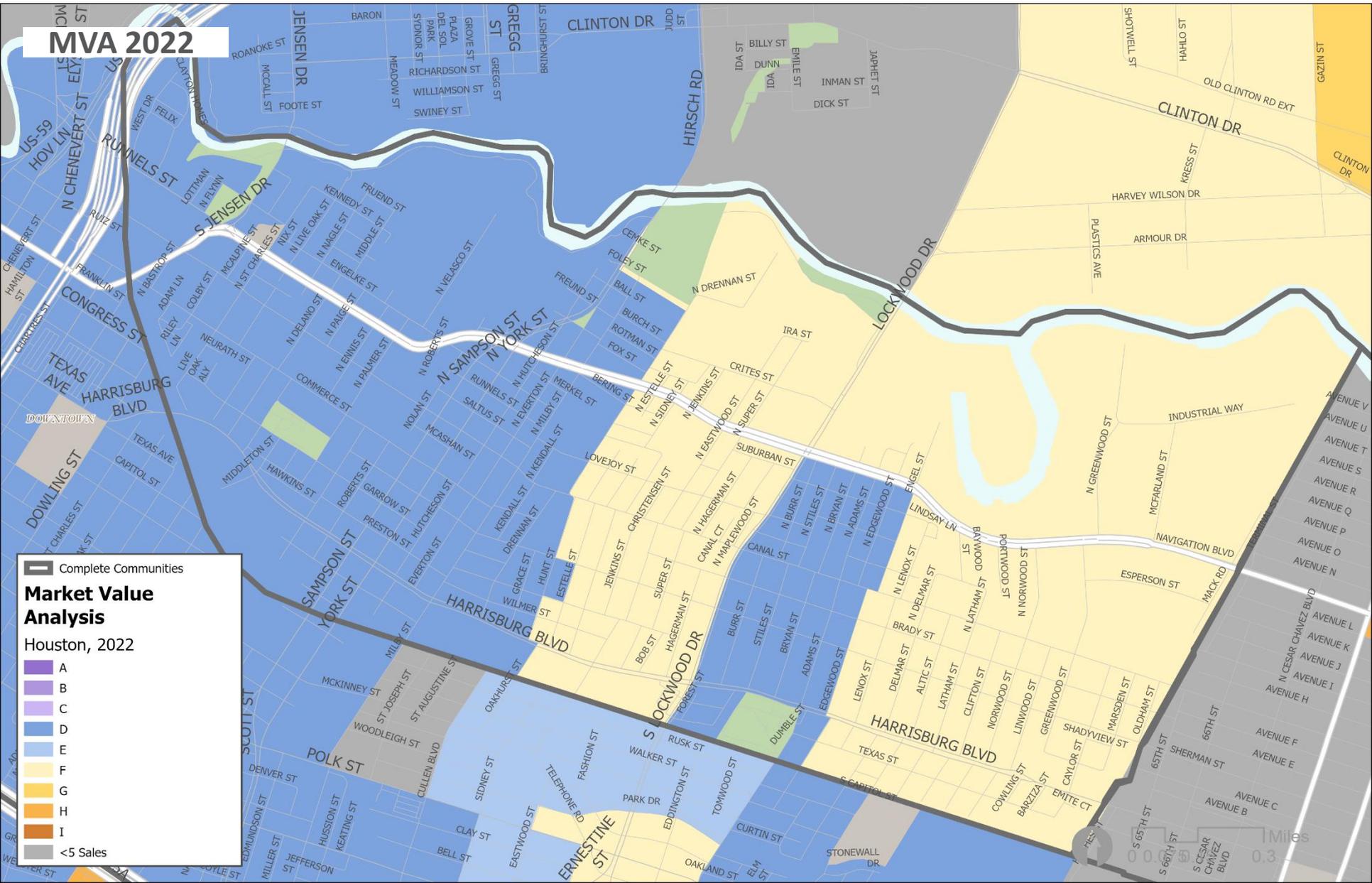
6) Magnolia Park - Manchester

MVA 2022
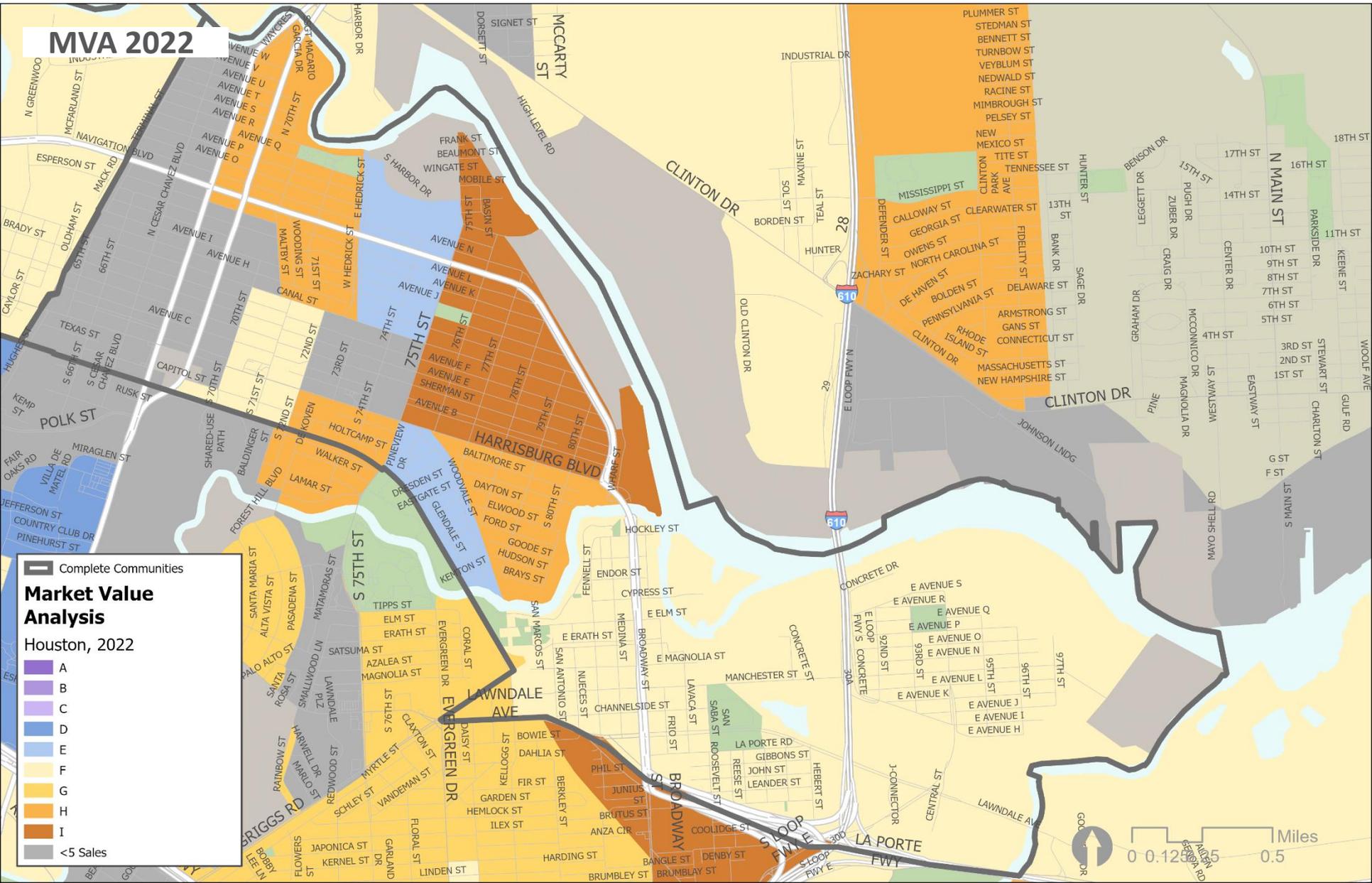
Market Value Analysis

Houston, 2022

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Complete Communities

7) Alief
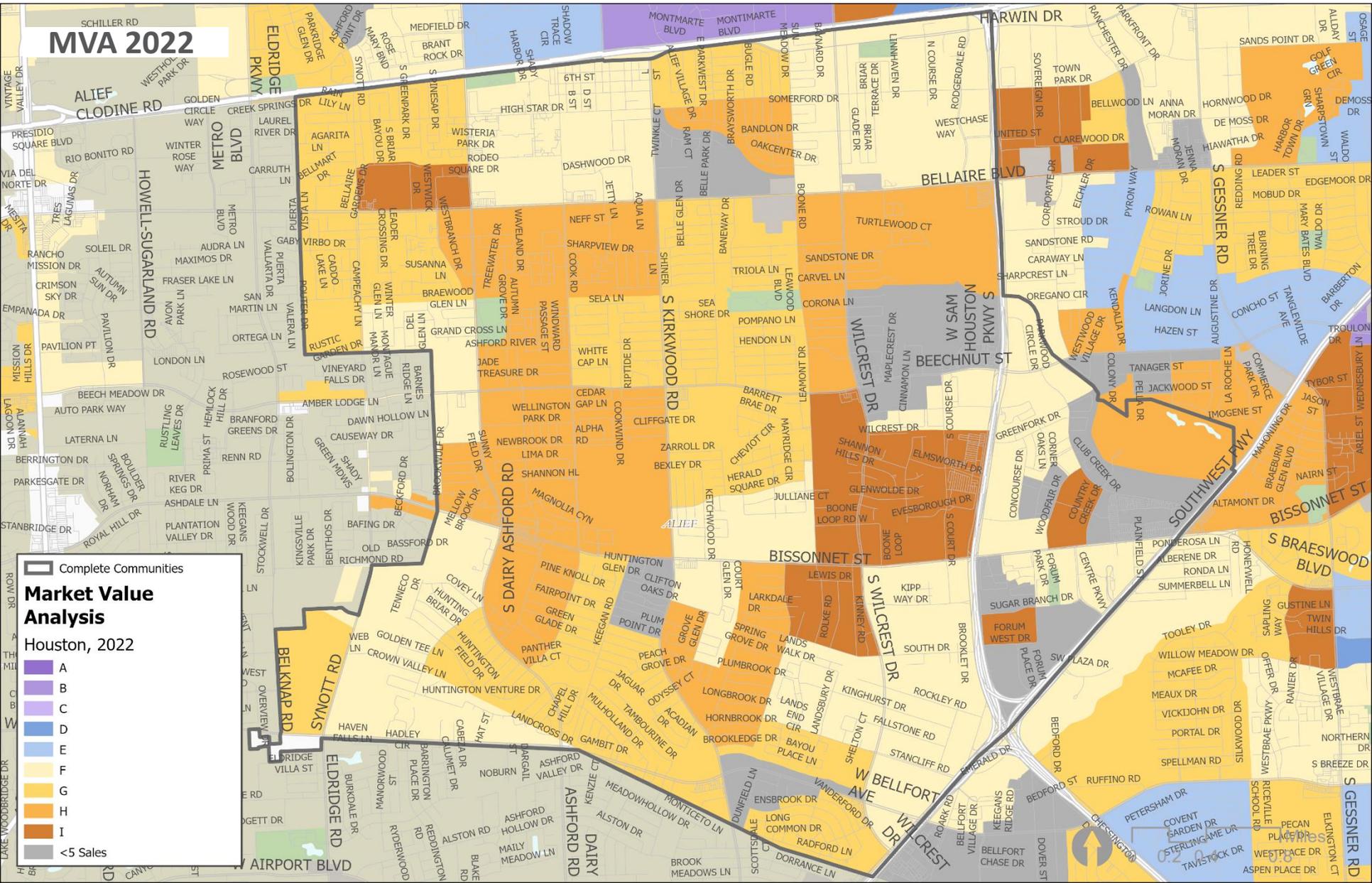
MVA 2022

Complete Communities

Market Value Analysis

Houston, 2022

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- <5 Sales

8) Gulfton

MVA 2022

Market Value Analysis

Houston, 2022

Complete Communities

Legend:
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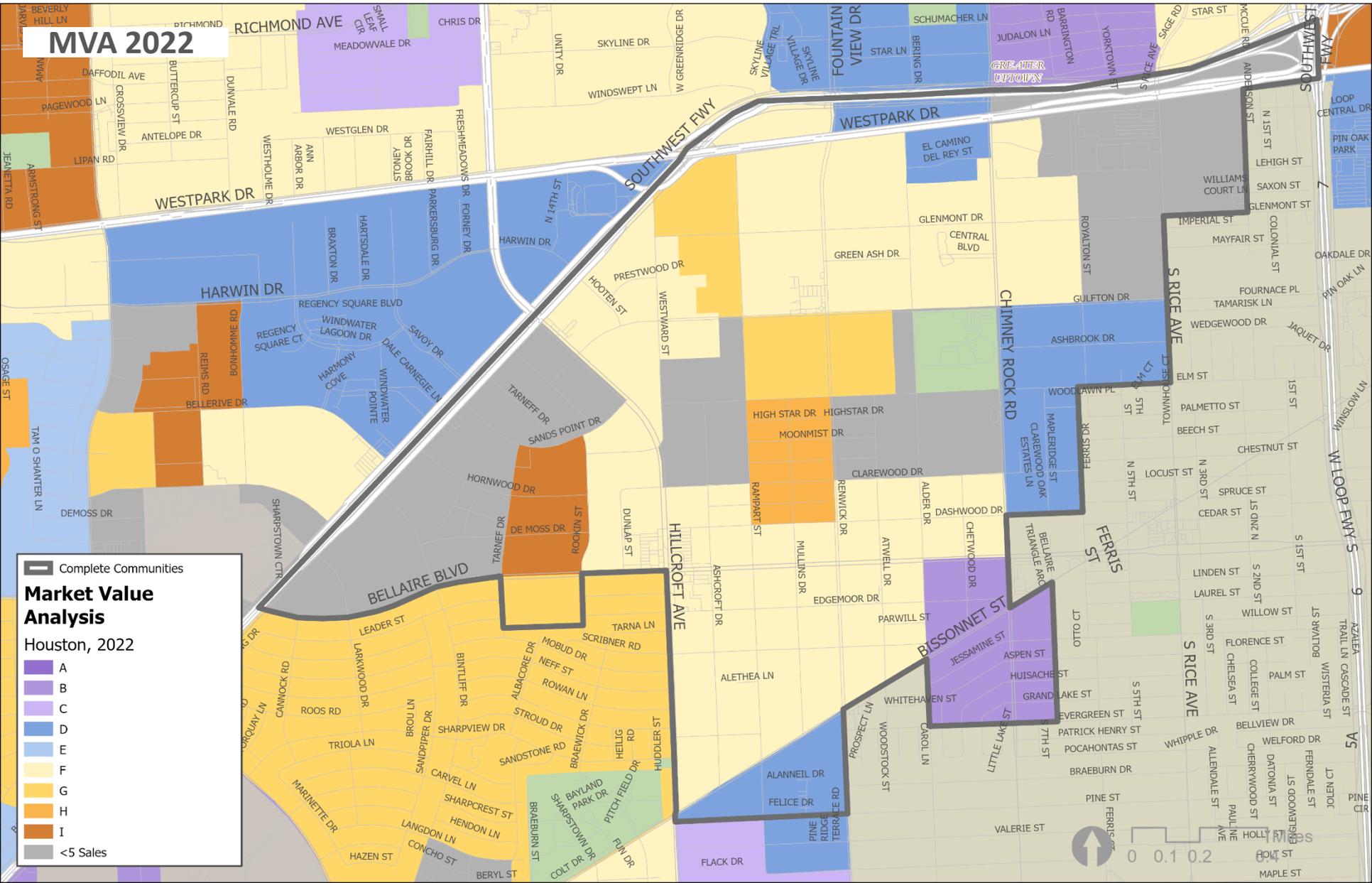
9) Sunnyside

MVA 2022
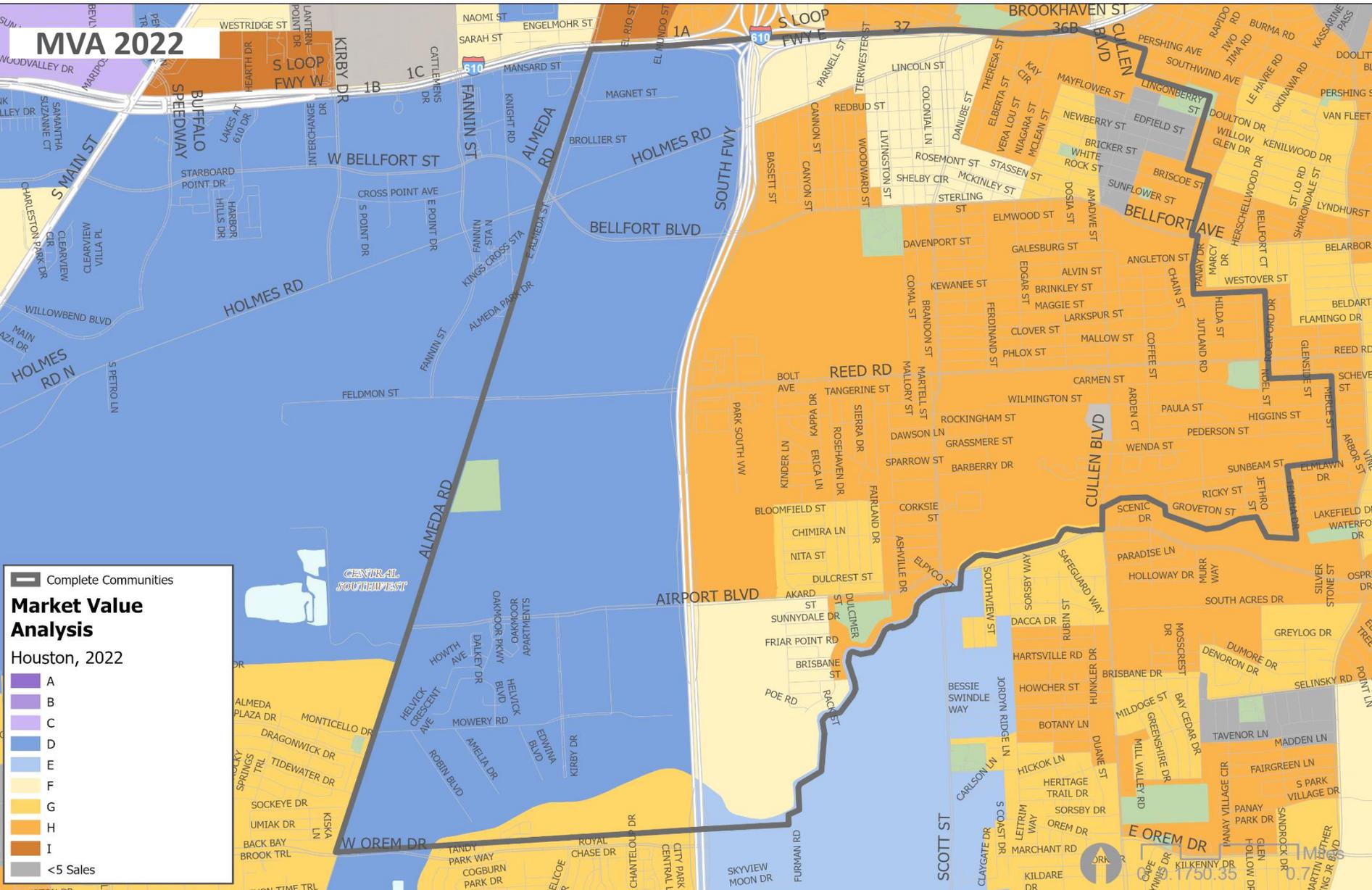
Market Value Analysis

Houston, 2022

Complete Communities

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<5 Sales

10) Fort Bend Houston

MVA 2022
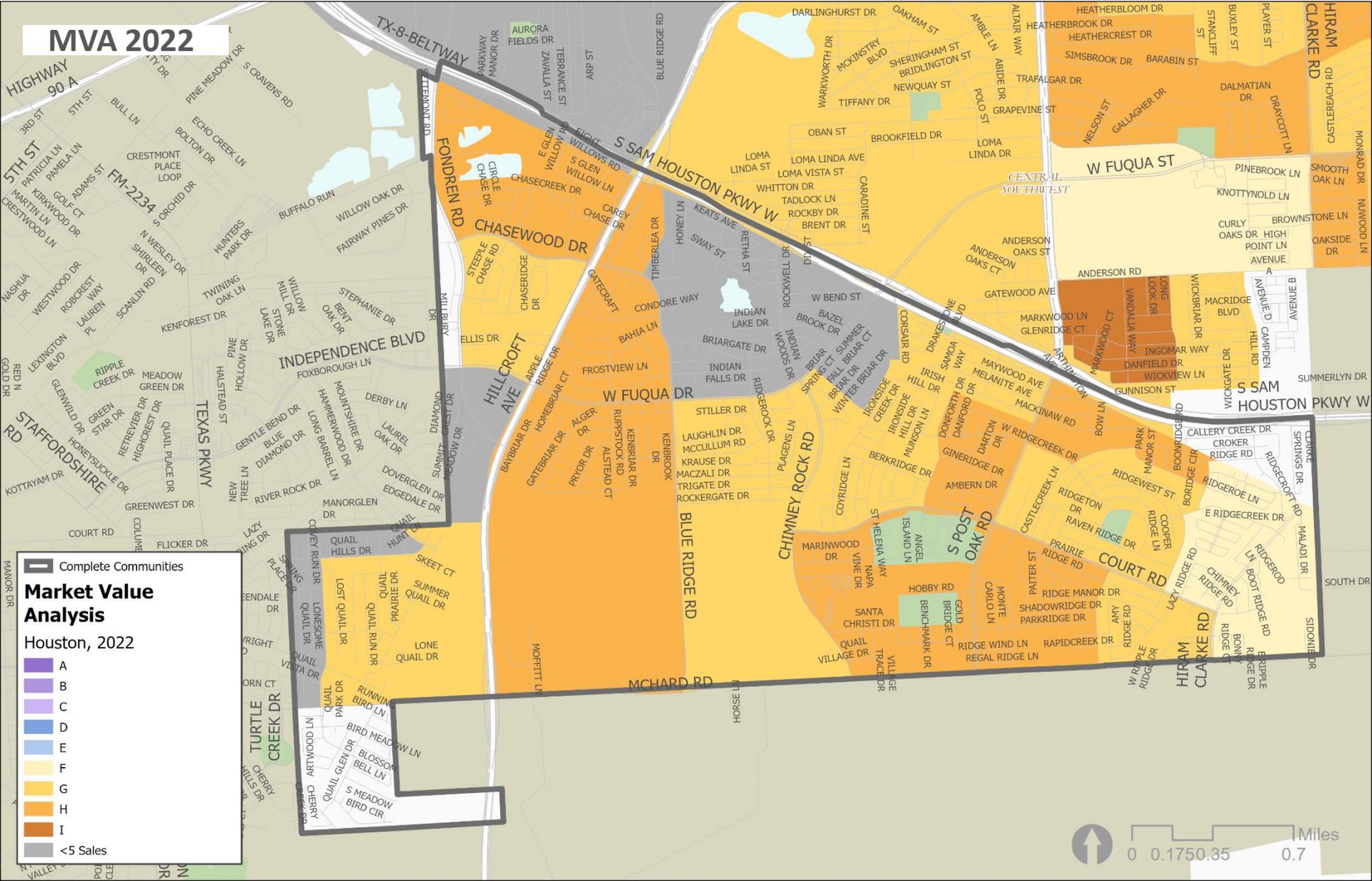
Market Value Analysis

Houston, 2022

- A
- B
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- D
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- F
- G
- H
- I
- <5 Sales

Complete Communities

Resident Demographics by Market Type

Population by Market Type

	White	Black	Asian	Hispanic	Other	Total Population
A	18,297 (80%)	552 (2%)	1,049 (5%)	2,519 (11%)	579 (3%)	**22,996 (100%)**
B	76,696 (55%)	12,048 (9%)	17,019 (12%)	30,180 (22%)	4,334 (3%)	**140,277 (100%)**
C	110,502 (69%)	5,165 (3%)	15,511 (10%)	24,910 (16%)	4,237 (3%)	**160,325 (100%)**
D	88,439 (30%)	61,705 (21%)	23,843 (8%)	111,097 (38%)	6,823 (2%)	**291,907 (100%)**
E	116,056 (43%)	41,721 (15%)	21,682 (8%)	84,585 (31%)	5,990 (2%)	**270,034 (100%)**
F	79,108 (15%)	118,539 (23%)	39,808 (8%)	268,278 (52%)	8,653 (2%)	**514,386 (100%)**
G	61,312 (14%)	103,209 (23%)	29,091 (7%)	247,261 (55%)	6,035 (1%)	**446,908 (100%)**
H	22,733 (7%)	117,592 (38%)	11,524 (4%)	157,345 (50%)	4,011 (1%)	**313,205 (100%)**
I	8,838 (8%)	32,663 (29%)	6,275 (5%)	65,247 (57%)	1,114 (1%)	**114,137 (100%)**
Insuf Sales	48,388 (18%)	65,385 (24%)	12,176 (4%)	140,792 (52%)	4,840 (2%)	**271,581 (100%)**
City	630,369 (25%)	558,579 (22%)	177,978 (7%)	1,132,214 (44%)	46,616 (2%)	**2,545,756 (100%)**

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Five Year Change in Population (2014 to 2019)

Population Change by Market Type

	Population 2010-14	Population 2015-19	Change in Population
A	23,737	22,996	-741 (-3%)
B	119,891	140,277	+20,386 (17%)
C	160,444	160,325	-119 (<1%)
D	265,198	291,907	+26,709 (10%)
E	264,477	270,034	+5,557 (2%)
F	472,463	514,386	+41,923 (9%)
G	433,334	446,908	+13,574 (3%)
H	299,028	313,205	+14,177 (5%)
I	105,671	114,137	+8,466 (8%)
Insuf Sales	255,750	271,581	+15,831 (6%)
City	2,399,993	2,545,756	+145,763 (6%)

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Family and Household Types by Market Type

Household Type by Market Type

	Non-Family Households	Families without Children	Two Parents with Children	One Parent with Children	Total Households
A	2,549 (28%)	3,978 (44%)	2,226 (25%)	260 (3%)	**9,013 (100%)**
B	35,587 (54%)	17,656 (27%)	9,902 (15%)	3,251 (5%)	**66,396 (100%)**
C	20,883 (32%)	24,790 (38%)	16,678 (26%)	2,274 (4%)	**64,625 (100%)**
D	63,780 (50%)	34,472 (27%)	15,870 (12%)	13,304 (10%)	**127,426 (100%)**
E	32,044 (32%)	37,145 (37%)	23,046 (23%)	8,106 (8%)	**100,341 (100%)**
F	77,679 (41%)	52,175 (27%)	30,164 (16%)	30,377 (16%)	**190,395 (100%)**
G	35,826 (26%)	56,950 (41%)	30,490 (22%)	15,303 (11%)	**138,569 (100%)**
H	33,160 (32%)	36,897 (36%)	16,627 (16%)	15,674 (15%)	**102,358 (100%)**
I	16,011 (39%)	11,365 (28%)	6,546 (16%)	7,251 (18%)	**41,173 (100%)**
Insuf Sales	34,841 (37%)	27,699 (30%)	15,772 (17%)	15,405 (16%)	**93,717 (100%)**
City	352,360 (38%)	303,127 (32%)	167,321 (18%)	111,205 (12%)	**934,013 (100%)**

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Family and Household Types by Market Type

Household Type by Market Type

	Non-Family Households	Families without Children	Two Parents with Children	One Parent with Children	Total Households
A	2,549 (1%)	3,978 (1%)	2,226 (1%)	260 (<1%)	9,013 (1%)
B	35,587 (10%)	17,656 (6%)	9,902 (6%)	3,251 (3%)	66,396 (7%)
C	20,883 (6%)	24,790 (8%)	16,678 (10%)	2,274 (2%)	64,625 (7%)
D	63,780 (18%)	34,472 (11%)	15,870 (9%)	13,304 (12%)	127,426 (14%)
E	32,044 (9%)	37,145 (12%)	23,046 (14%)	8,106 (7%)	100,341 (11%)
F	77,679 (22%)	52,175 (17%)	30,164 (18%)	30,377 (27%)	190,395 (20%)
G	35,826 (10%)	56,950 (19%)	30,490 (18%)	15,303 (14%)	138,569 (15%)
H	33,160 (9%)	36,897 (12%)	16,627 (10%)	15,674 (14%)	102,358 (11%)
I	16,011 (5%)	11,365 (4%)	6,546 (4%)	7,251 (7%)	41,173 (4%)
Insuf Sales	34,841 (10%)	27,699 (9%)	15,772 (9%)	15,405 (14%)	93,717 (10%)
City	352,360 (100%)	303,127 (100%)	167,321 (100%)	111,205 (100%)	934,013 (100%)

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Economic Development Investment Analysis

Working Partner

Factors Influencing Market Growth and Development

Mortgage Credit

Flood Risk

Vacant Land

Housing Affordability

Gaps in Mortgage Availability For Lower Priced Homes

Mortgages for Homes Priced Below $150k Had Lower Origination Rates than Other Properties

Mortgage Denial Rates by Home Property Value, 2020 to 2021

	Originated Loans	Mortgage Applications	Share Approved/ Originated
Under $150k	1,936	2,743	71%
$150k to $200k	3,511	4,076	86%
$200k to $300k	7,713	8,685	89%
$300k to $400k	7,137	7,727	92%
$400k to $500k	4,618	4,873	95%
Over $500k	8,681	9,358	93%
All Applications	**33,596**	**37,462**	**90%**

*Only Includes first lien, home purchase applications for owner-occupied single-family homes with home value reported.

Roughly 1 in 5 Homes Sold Between 2020 and 2022 Were Priced Below $150,000

Distribution of Houston Home Sale Prices, 2020 to 2022

- Under $150k: 21%
- $150k to $200k: 18%
- $200k to $300k: 27%
- $300k to $400k: 14%
- $400k to $500k: 8%
- Over $500k: 12%

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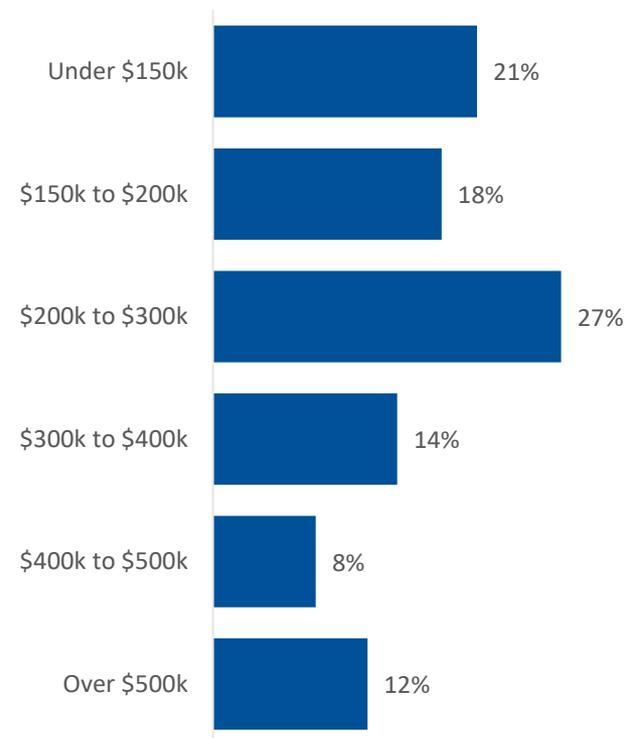
Access to Home Mortgage Credit

The table below shows mortgage outcomes from Home Mortgage Disclosure Application filings. The share of cash sales are estimated by comparing the number of originated loans with the number of residential transactions.

Mortgage Application Volume and Outcomes Vary Substantially Across MVA Market Types

Home Purchase Application Outcomes, 2020 - 2021					*Applications per Household, 2020 - 2021*		*Estimated Home Sales with Mortgages, 2021*		
	Originated Loans	Rejected Apps	Withdrawn Apps	Total Apps	Total Households	App per 100 Households	Home Sales, 2021	Originated Loans, 2021	Estimated Mortgage Sales
Purple Markets	12,128 (76%)	915 (6%)	2,858 (18%)	15,901 (100%)	144,970	11.0	5,680	6,604	>99%
Blue Markets	12,158 (74%)	1,172 (7%)	3,146 (19%)	16,476 (100%)	191,011	8.6	6,217	6,531	>99%
Yellow Markets	8,708 (67%)	1,770 (14%)	2,609 (20%)	13,087 (100%)	322,725	4.1	6,028	4,695	78%
Orange Markets	415 (65%)	85 (13%)	137 (22%)	637 (100%)	28,038	2.3	364	209	57%
Unclass.	546 (64%)	131 (15%)	182 (21%)	859 (100%)	40,598	2.1	405	272	67%
All Markets	**33,955 (72%)**	**4,073 (9%)**	**8,932 (19%)**	**46,960 (100%)**	**727,342**	**6.5**	**18,694**	**18,311**	**98%**

*Only Includes first lien, home purchase applications for owner-occupied single-family homes

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Flood Risk and Housing Markets

FEMA Flood Map
FIRM Maps

- Floodway
- 100-year Floodplain
- 500-year Floodplain
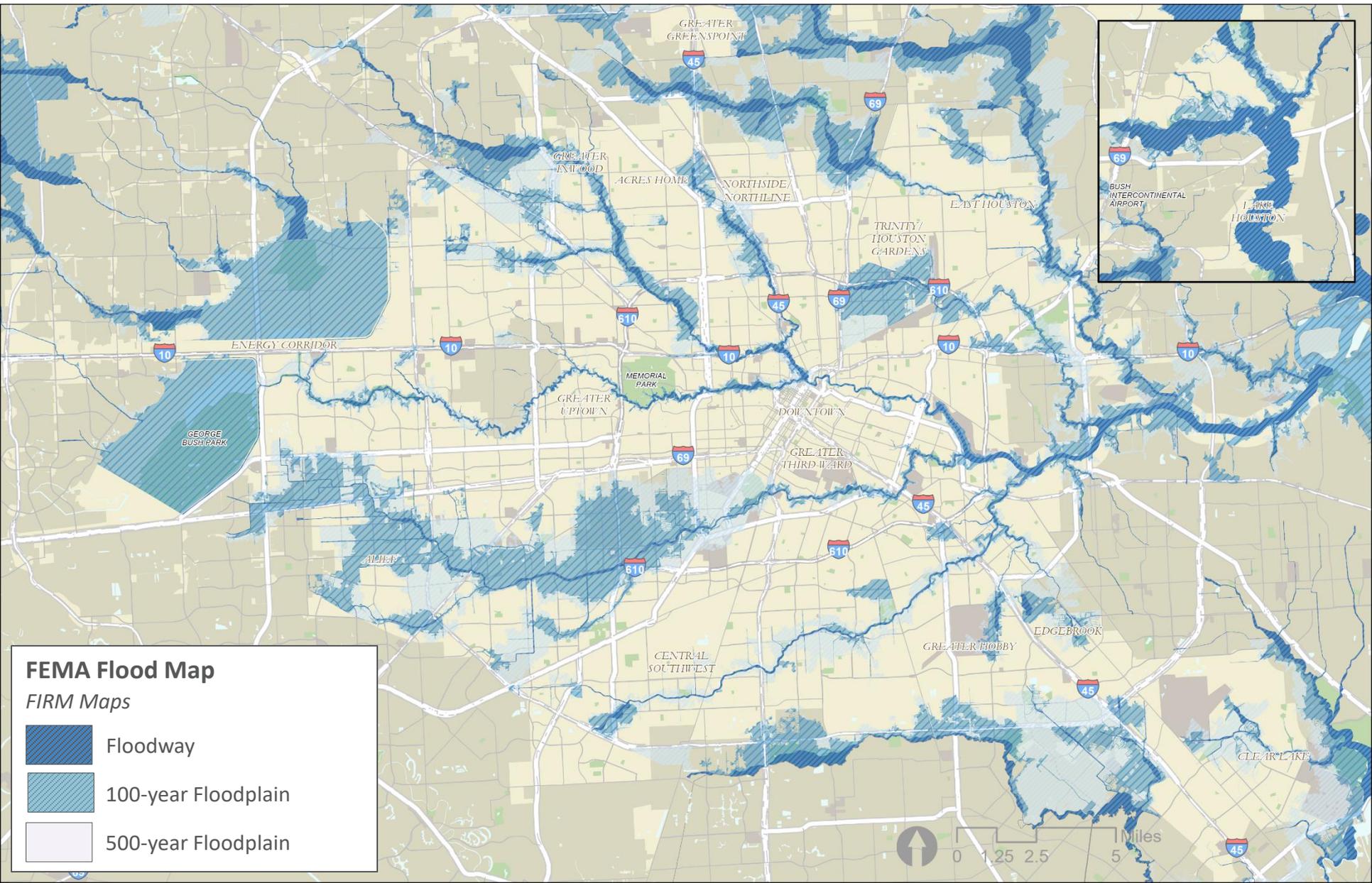
# Residential Parcels in Flood Areas by Market Type

Although "C" and "I" Markets Had Largest Share of Homes in High-Risk Areas, Flood Risk Was Elevated Across F – H Markets

Share of Residential Parcels by FEMA Flood Classification

	Share of Homes in 100-year Area	Share of Homes in 500-year Area	Share of Homes Not in Flood Area	All Homes
A	6%	11%	83%	*100%*
B	7%	10%	82%	*100%*
C	16%	16%	68%	*100%*
D	5%	14%	81%	*100%*
E	10%	22%	67%	*100%*
F	13%	12%	75%	*100%*
G	14%	23%	62%	*100%*
H	13%	15%	73%	*100%*
I	20%	19%	61%	*100%*
Total	**12%**	**17%**	**70%**	*100%*

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Housing Markets and Flood Risk

Market Value Analysis

Houston, 2022

- A
- B
- C
- D
- E
- F
- G
- H
- I
- <5 Sales
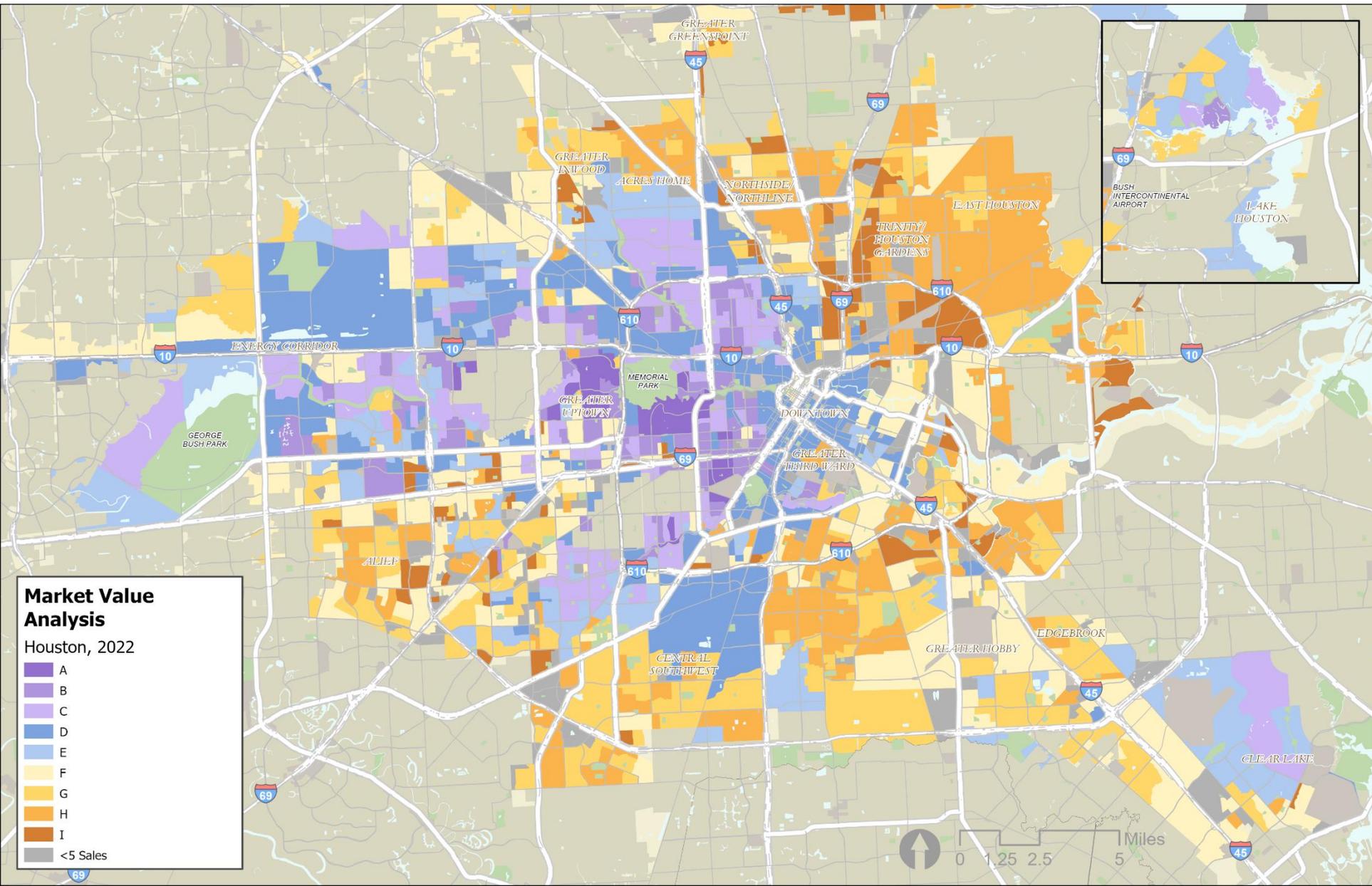
Housing Markets and Flood Risk
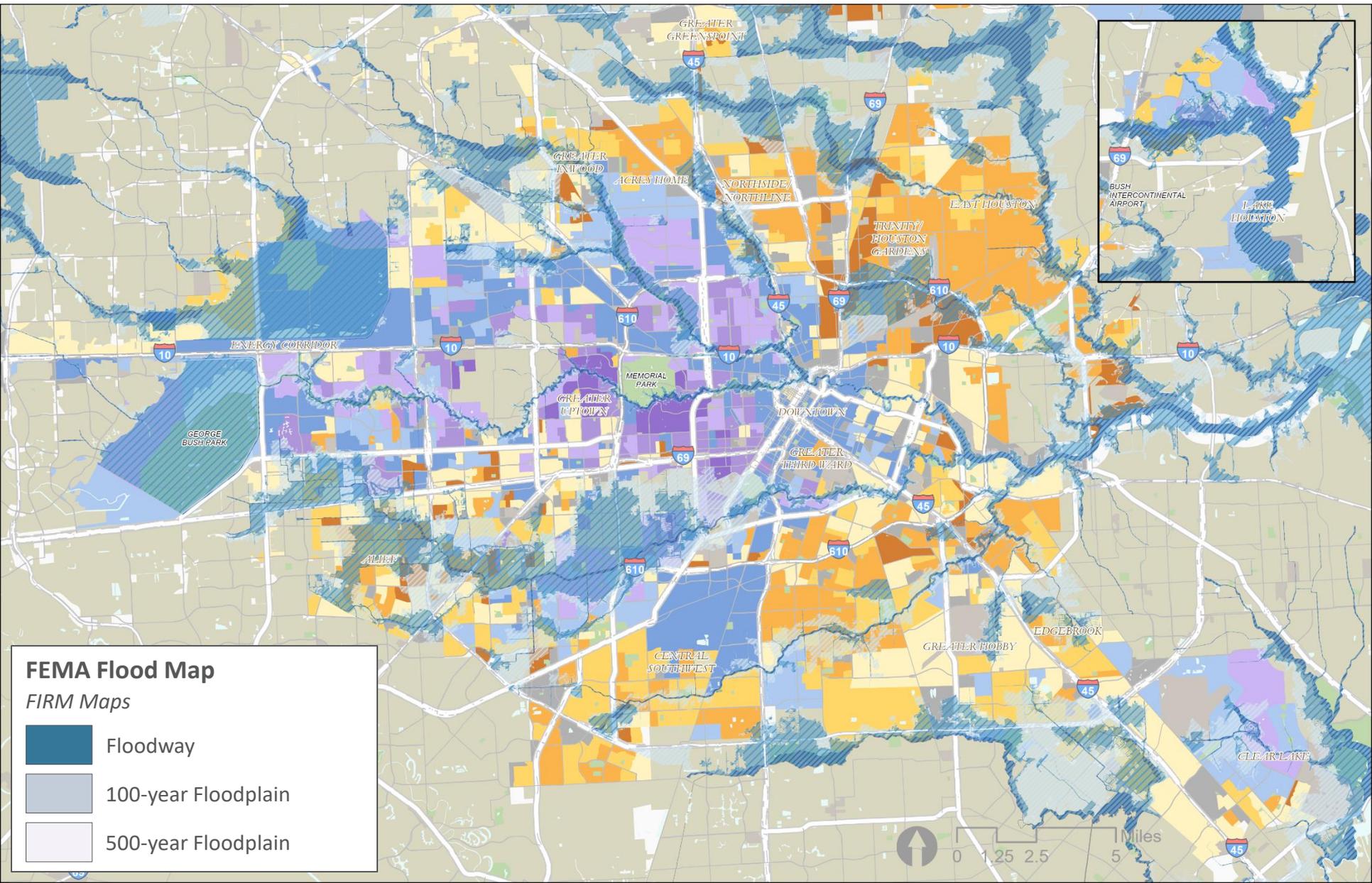
FEMA Flood Map
FIRM Maps

- Floodway
- 100-year Floodplain
- 500-year Floodplain

Flood Risk and Market Change

Areas with fewer at-risk homes were more likely to see their MVA classifications improve between 2018 and 2022

Areas That Saw Classification Declined Since 2016 Had More Homes in Flood Risk Areas

Average Share of Residential Parcels in 100-year Flood Areas
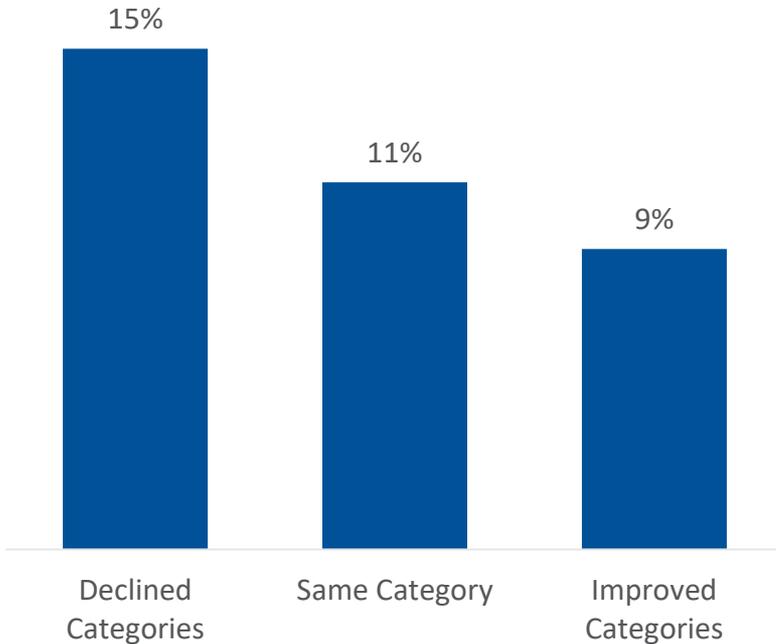
Nearly 60% of Block Groups that Improved Since 2016 Had Minimal Flood Risk (<5% of Homes at Risk)

Flood Risk Among Block Groups That Improved Classifications Since 2016 MVA

Legend:
- Under 5% of Homes At-Risk
- 5% to 33% of Homes At-Risk
- 33% to 66% of Homes At-Risk
- +66% of Homes At-Risk
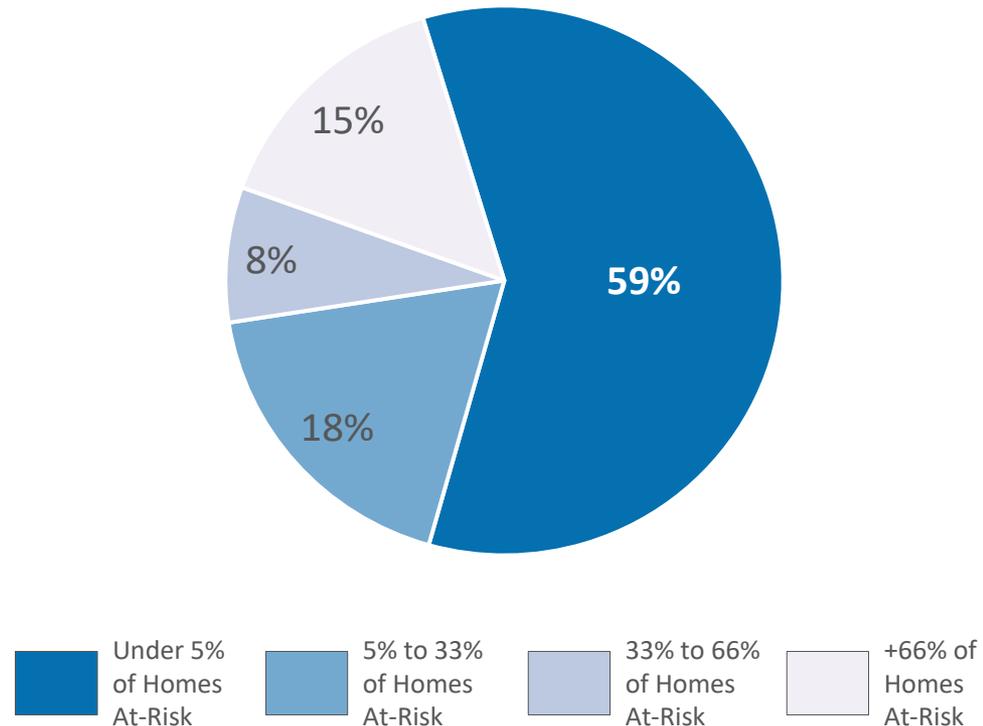
Vacant Land and New Construction

New Construction Activity is Concentrated in Areas with the Most Vacant Land

Average New Dwelling Units by Proportion of Residential Vacant Land

Share of Residential Area that is Vacant Land
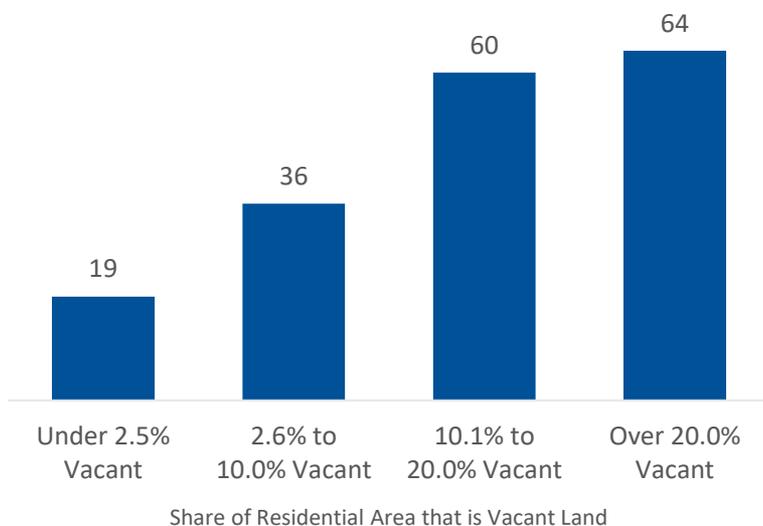
Most Vacant Land in the City is Concentrated in Northeast Houston

Share of Residential Parcel Area that is Vacant Land

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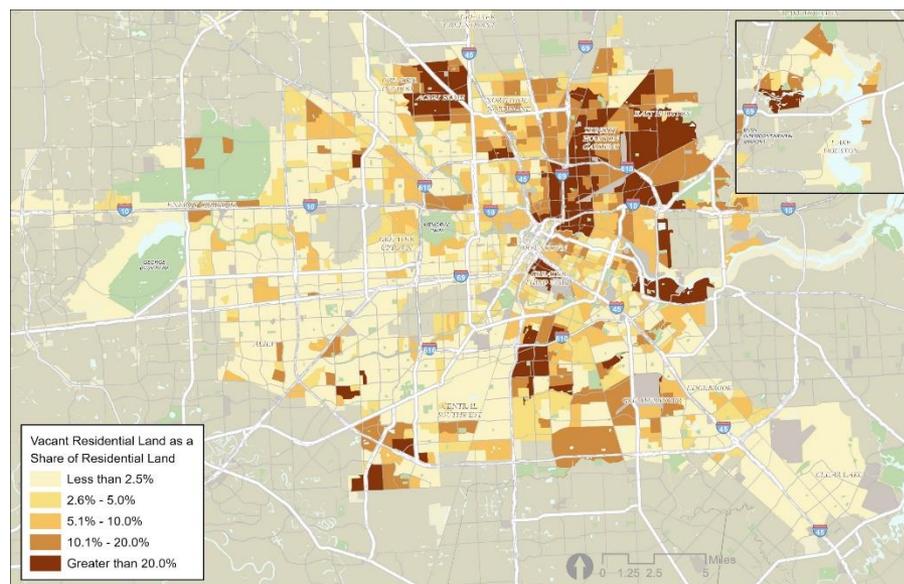
Location of Vacant Land and Markets

The Highest Concentration of Vacant Land was in E, G, and H Markets

Distribution of Vacant Residential Land Area by MVA Housing Market

	All Residential Land Area	Vacant Residential Land	Vacant Residential Land Without Flood Risk
A	2%	2%	1%
B	5%	2%	1%
C	11%	5%	2%
D	9%	8%	9%
E	17%	14%	12%
F	13%	6%	7%
G	23%	21%	17%
H	17%	36%	41%
I	4%	6%	11%
Total	100%	100%	100%

Highest opportunity for development (and potential for displacement)

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The Geography of Affordability in Houston

Families Earning Near the Median Income Can Afford to Buy in Middle-to-Stressed Markets, not in the City's Strong Markets

Share of Block Groups Where Median Home Prices Were Affordable at 80%, 100%, 120%, 200% of City's Median Family Income

	Earning 200% Family Income ($117,058)	Earning 120% Family Income ($70,235)	Earning 100% Family Income ($58,529)	Earning 80% Family Income ($46,823)
A	0%	0%	0%	0%
B	0%	0%	0%	0%
C	0%	0%	0%	0%
D	64%	0%	0%	0%
E	95%	0%	0%	0%
F	100%	74%	34%	6%
G	100%	99%	63%	11%
H	100%	100%	99%	69%
I	100%	100%	100%	100%
Total	80%	60%	44%	28%

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Areas Affordable at 200% Family Income

Areas Affordable at 200% Median Family Income

☐ Affordable
☒ Unaffordable

Share of Market Affordable at 200% Median Income ($117,058)

A	B	C	D	E	F	G	H	I
0%	0%	0%	64%	95%	100%	100%	100%	100%
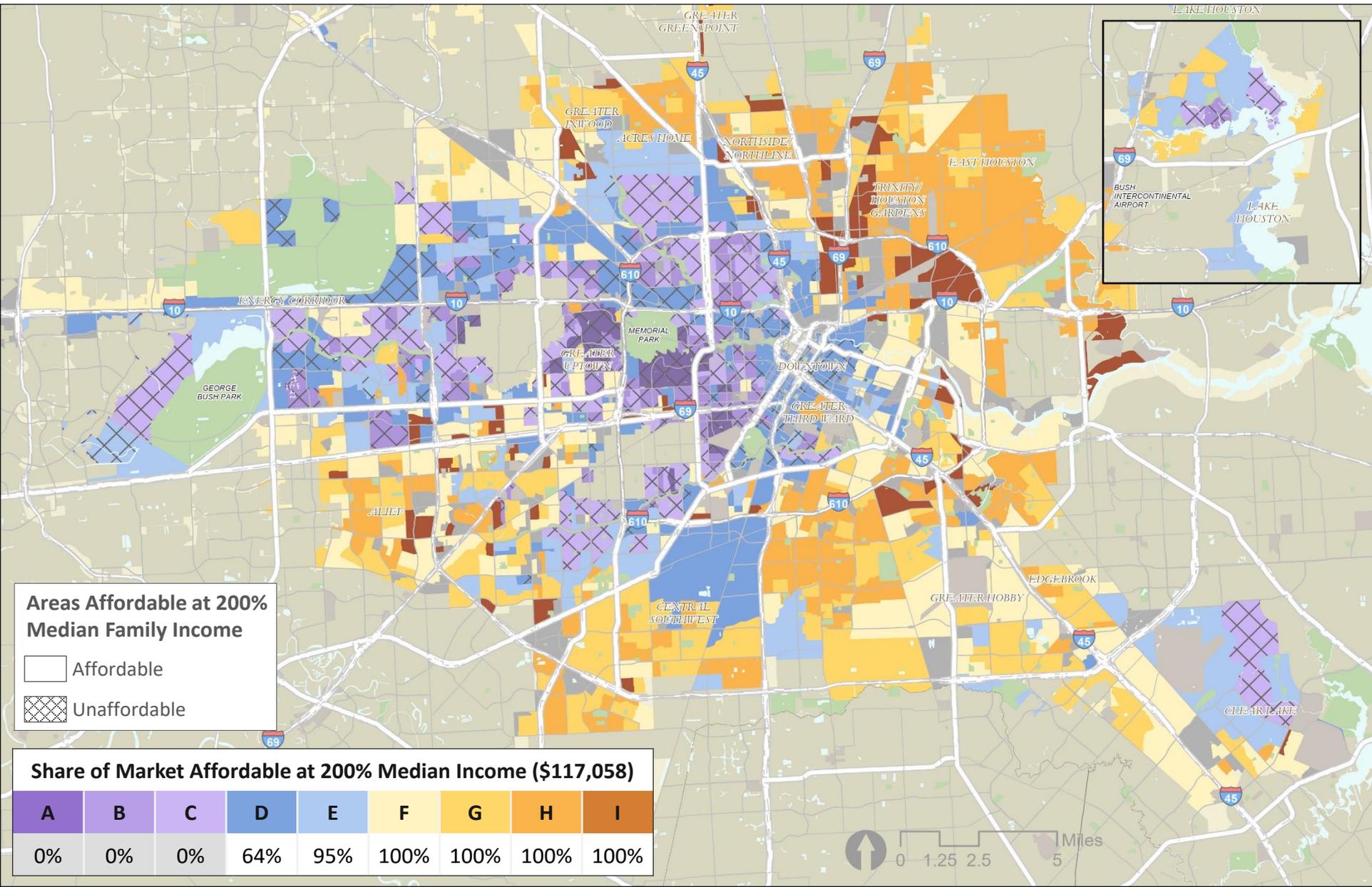
Areas Affordable at 120% Family Income
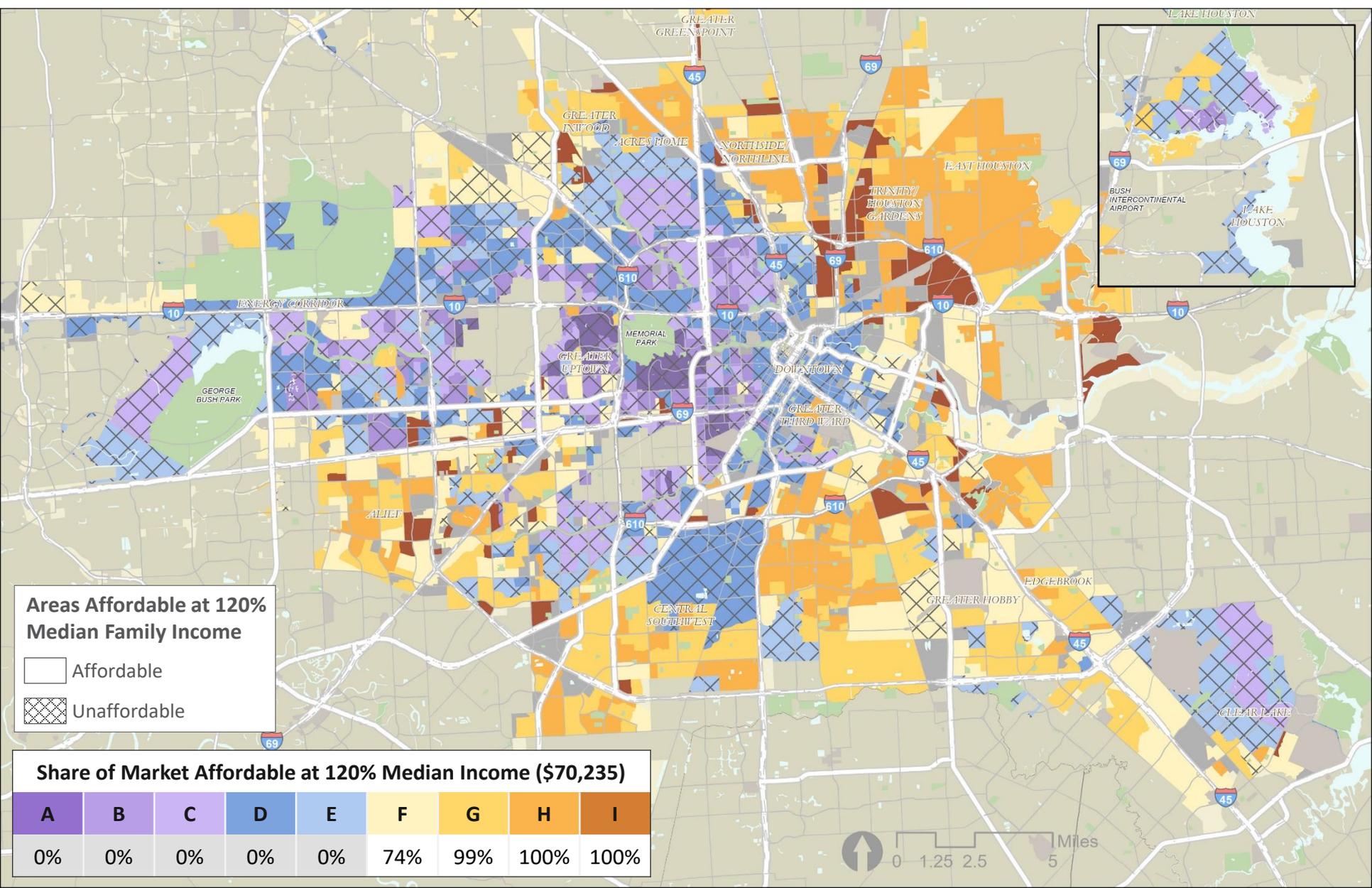
Areas Affordable at 120% Median Family Income

☐ Affordable

▨ Unaffordable

Share of Market Affordable at 120% Median Income ($70,235)

A	B	C	D	E	F	G	H	I
0%	0%	0%	0%	0%	74%	99%	100%	100%

Areas Affordable at 100% Family Income
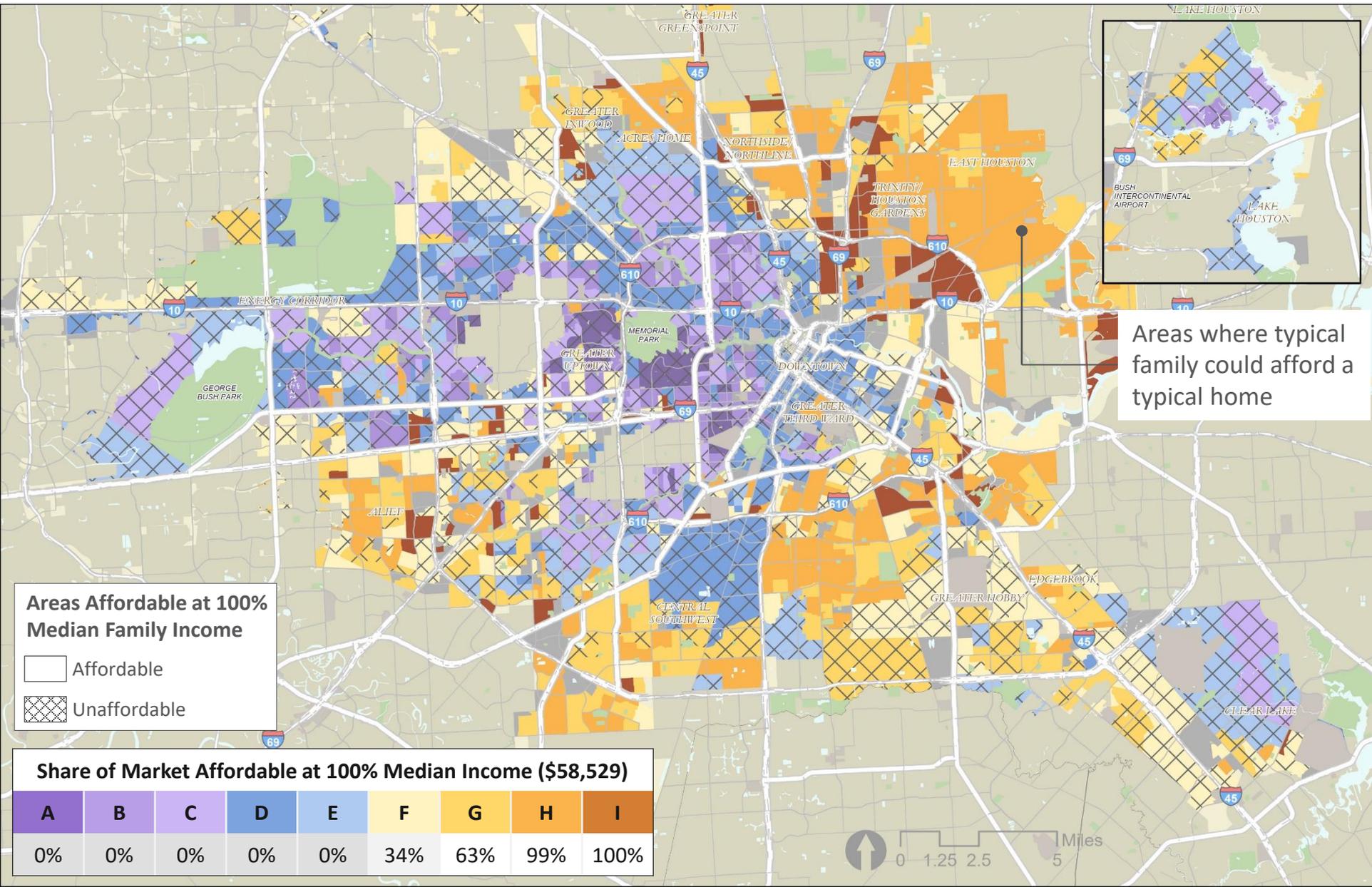
Areas where typical family could afford a typical home

Areas Affordable at 100% Median Family Income

☐ Affordable

▨ Unaffordable

Share of Market Affordable at 100% Median Income ($58,529)

A	B	C	D	E	F	G	H	I
0%	0%	0%	0%	0%	34%	63%	99%	100%

Areas Affordable at 80% Family Income
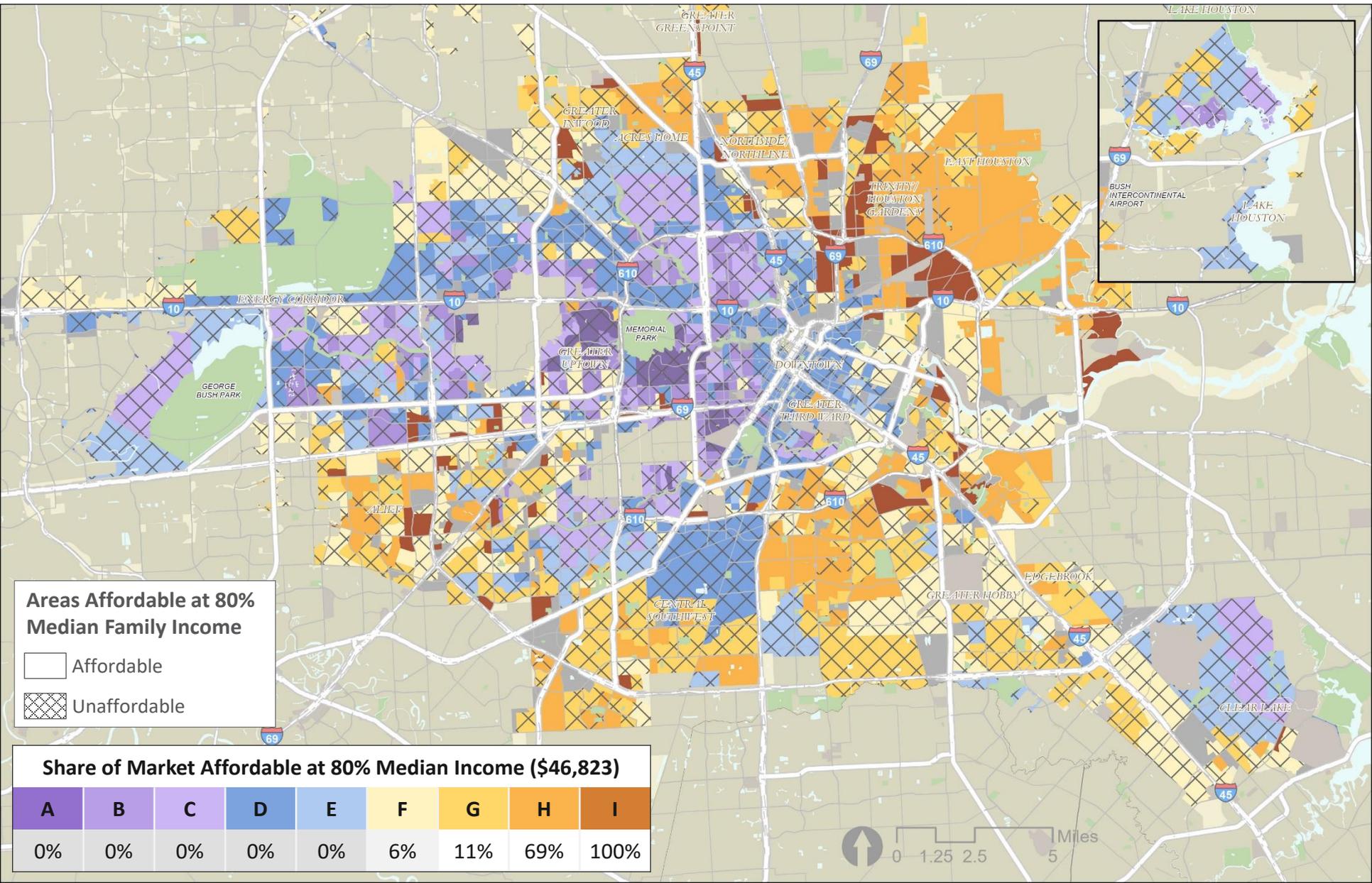
Areas Affordable at 80% Median Family Income

▢ Affordable

▨ Unaffordable

Share of Market Affordable at 80% Median Income ($46,823)

A	B	C	D	E	F	G	H	I
0%	0%	0%	0%	0%	6%	11%	69%	100%
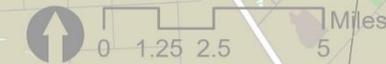
# The Geography of Affordability in Houston By Race

**White Families on Average Have Greater Purchasing
Power than Black and Hispanic Families**

*Share of Block Groups Where Median Home Prices Were Affordable to White,
Black and Hispanic Families Earning the City's Median Family Income*

	White ($70,122)	Black ($43,919)	Hispanic ($44,873)	Citywide ($58,529)
A	0%	0%	0%	*0%*
B	0%	0%	0%	*0%*
C	0%	0%	0%	*0%*
D	0%	0%	0%	*0%*
E	0%	0%	0%	*0%*
F	82%	2%	2%	34%
G	99%	4%	6%	63%
H	100%	52%	55%	99%
I	100%	100%	100%	100%
Total	**60%**	**24%**	**25%**	**44%**

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Areas Affordable for Median White Family

Median White Income
$70,122

Areas Affordable for
Median White Family

☐ Affordable

☒ Unaffordable

Share of Market Affordable

A	B	C	D	E	F	G	H	I
0%	0%	0%	0%	0%	82%	99%	100%	100%
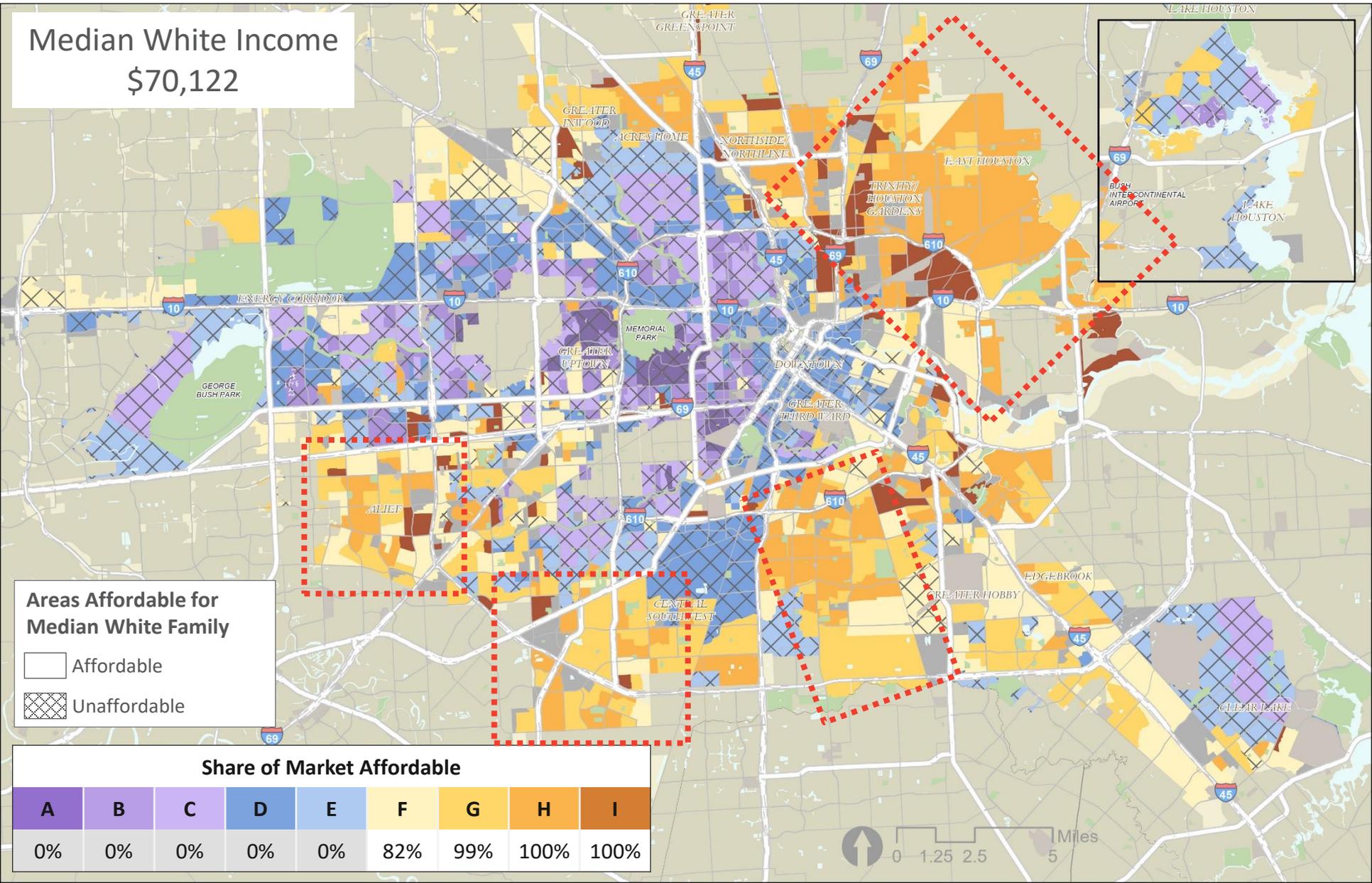
Areas Affordable for Median Black Family

Median Black Income
$43,919

Areas Affordable for Median Black Family

☐ Affordable

▨ Unaffordable

Share of Market Affordable

A	B	C	D	E	F	G	H	I
0%	0%	0%	0%	0%	2%	4%	52%	100%
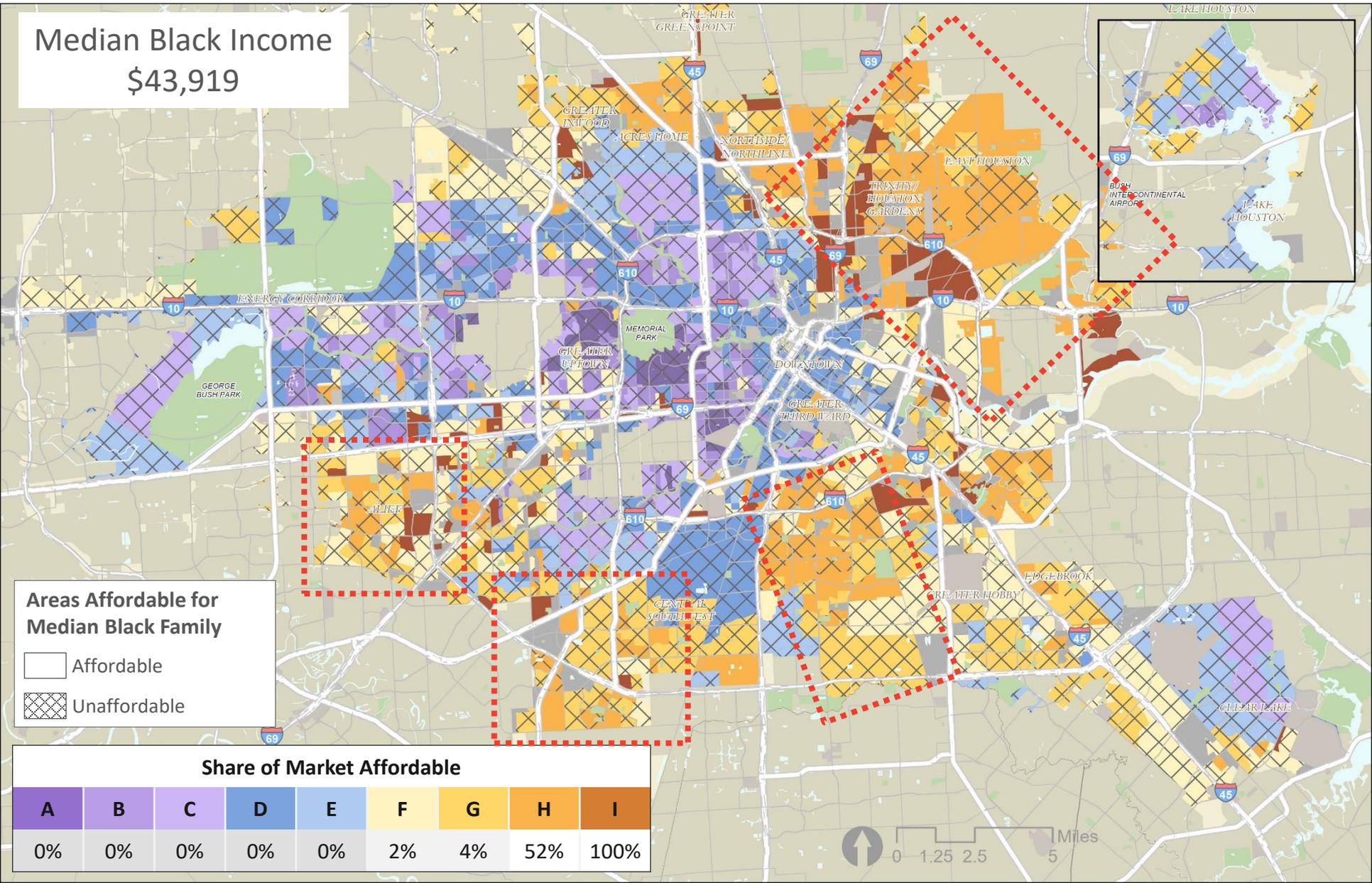
Areas Affordable for Median Hispanic Family

Median Hispanic Income
$44,873

Areas Affordable for
Median Hispanic Family

Affordable

Unaffordable

Share of Market Affordable

A	B	C	D	E	F	G	H	I
0%	0%	0%	0%	0%	2%	6%	55%	100%
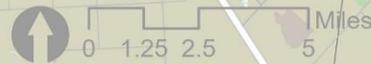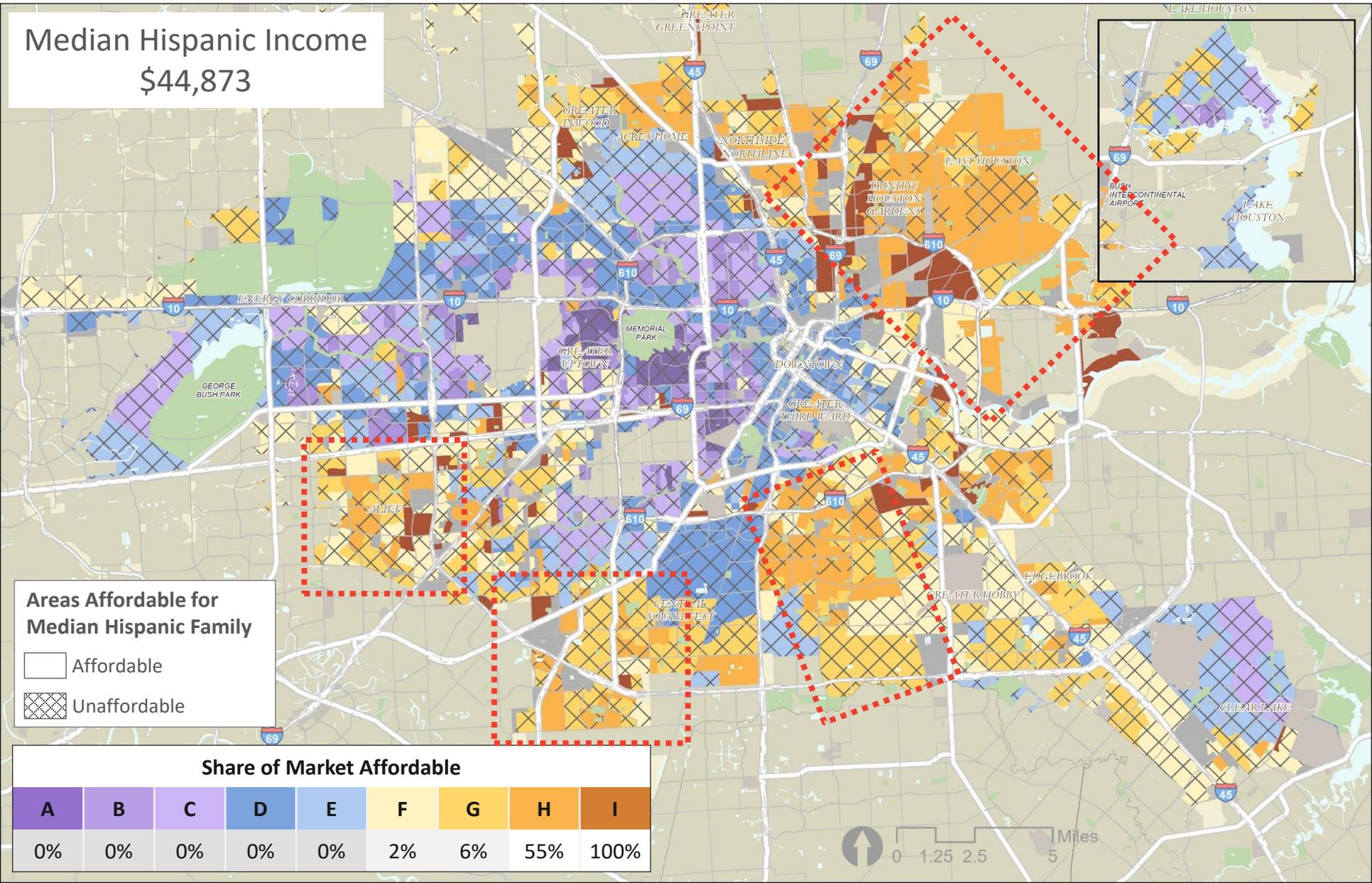
Displacement Risk Ratio

Measuring Resident Displacement Risk

Our Approach to Measuring Housing Market
Pressure and Resident Displacement Risk

The concern driving this approach to measure is the *involuntary* aspect of displacement.

→ Households forced to leave their neighborhoods due to circumstances beyond their control (e.g., rising taxes, rent increase, condo conversion).

The analysis identifies areas where current housing prices are be unaffordable to long-term residents.

→ Assumes housing should be close to 3x family income (following HUD guidelines).

Examines ratio of a long-term residents' income to current housing prices to spotlight areas of concern.

→ Healthy neighborhoods should be stable or follow regional trends. Areas with rapid increases (or decreases) in ratios signal potential concern.

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The Displacement Risk Ratio

Calculating the Displacement Risk Ratio

1 | Find incomes of "long-term residents" who lived in homes during beginning time period (2015/16)

2 | Use inflation rate to calculate income of long-term residents between beginning time period and today (2021-22)

3 | Calculate ratio of long-term resident income and actual home prices over time

4 | Remove city average from individual block group ratios to account for regional trends

Interpreting Displacement Risk Ratio Values

Higher DRR values reflect a more challenging environment for long-term residents and the existence of displacement pressure…

Possible concerns about market of demand   *Homes no longer attainable for long-term residents*

-2.5   -1.5   -0.5   0.0   +0.5   +1.5   +2.5   3.5+

Prices reflect standard notions of affordability
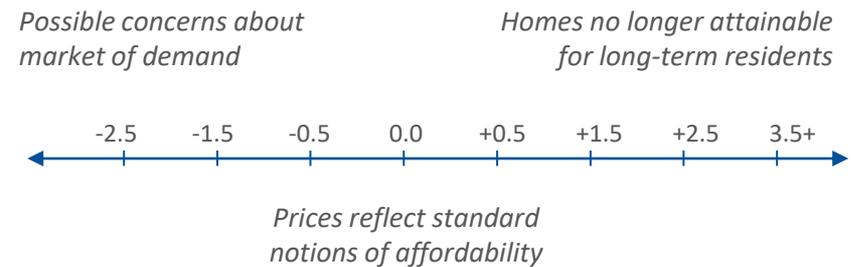
… Lower values may reflect a lack of market value and concerns with excess housing supply or vacancy/abandonment.

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Identifying Types of Market Stress

While Each Neighborhood Could Have Affordability Challenges, Neighborhood #2 Has the Highest Risk of Resident Displacement

DRR Trends in Three Philadelphia Neighborhoods

Legend: Neighborhood 1, Neighborhood 2, Neighborhood 3
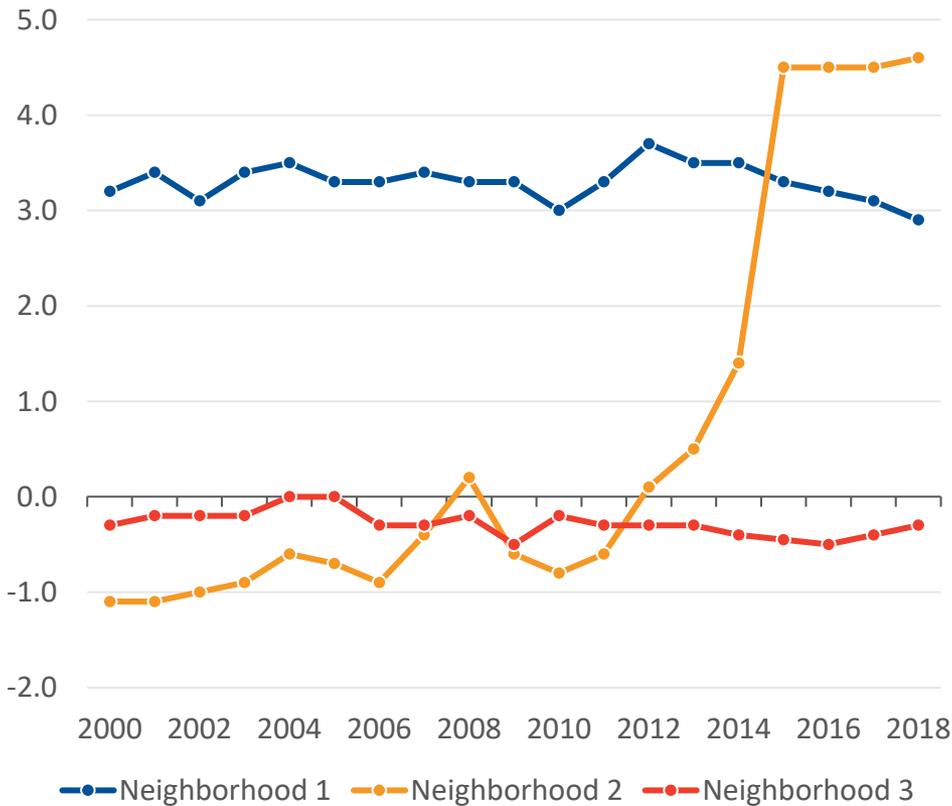
Middle and Weaker Markets Experiencing High Pressure (Rising DRR) or Lagging Pressure (Falling DRR) Are Often Priority

MVA Classifications and DRR Categories

	Strong Markets	Middle Markets	Weaker Markets
High Pressure			
Stable Areas			
Lagging Markets			

Highest Immediate Concern for Price-Based Displacement

Concern for Housing Market Decline & Disinvestment

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DRR Values, 2015 – 2016

Displacement Risk Ratio
2015 to 2016, Adjusted

- -3.1 or more
- -1.6 to -3.0
- -0.26 to -1.5
- +/- 0.25
- +0.26 to +1.50
- +1.51 to +3.0
- +3.0 or more

DRR Values, 2020 – 2021

Displacement Risk Ratio
2015 to 2016, Adjusted

- -3.1 or more
- -1.6 to -3.0
- -0.26 to -1.5
- +/- 0.25
- +0.26 to +1.50
- +1.51 to +3.0
- +3.0 or more

Change in DRR Values 2015-16 to 2020-21

Change in DRR Values 2015-16 to 2020-21

Large Increase in DRR Values Indicates Risk of Resident Displacement

Change in DRR
2016 to 2021 (Adjusted)

- Decline Over 1.00
- Minimal Change (+/- 1.00)
- Increase 1.00 to 1.50
- Increase 1.50 to 3.00
- Increase Over 3.00
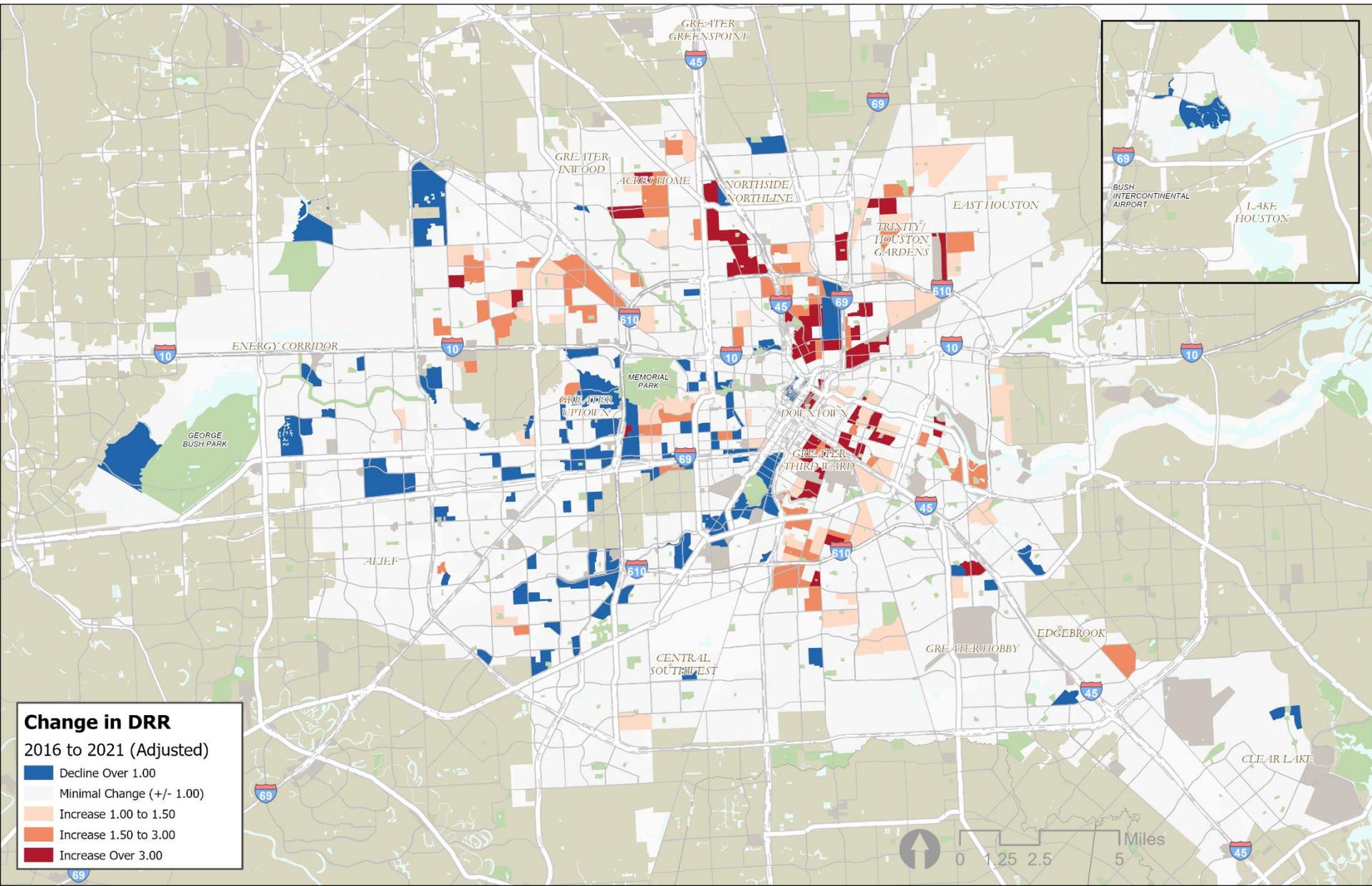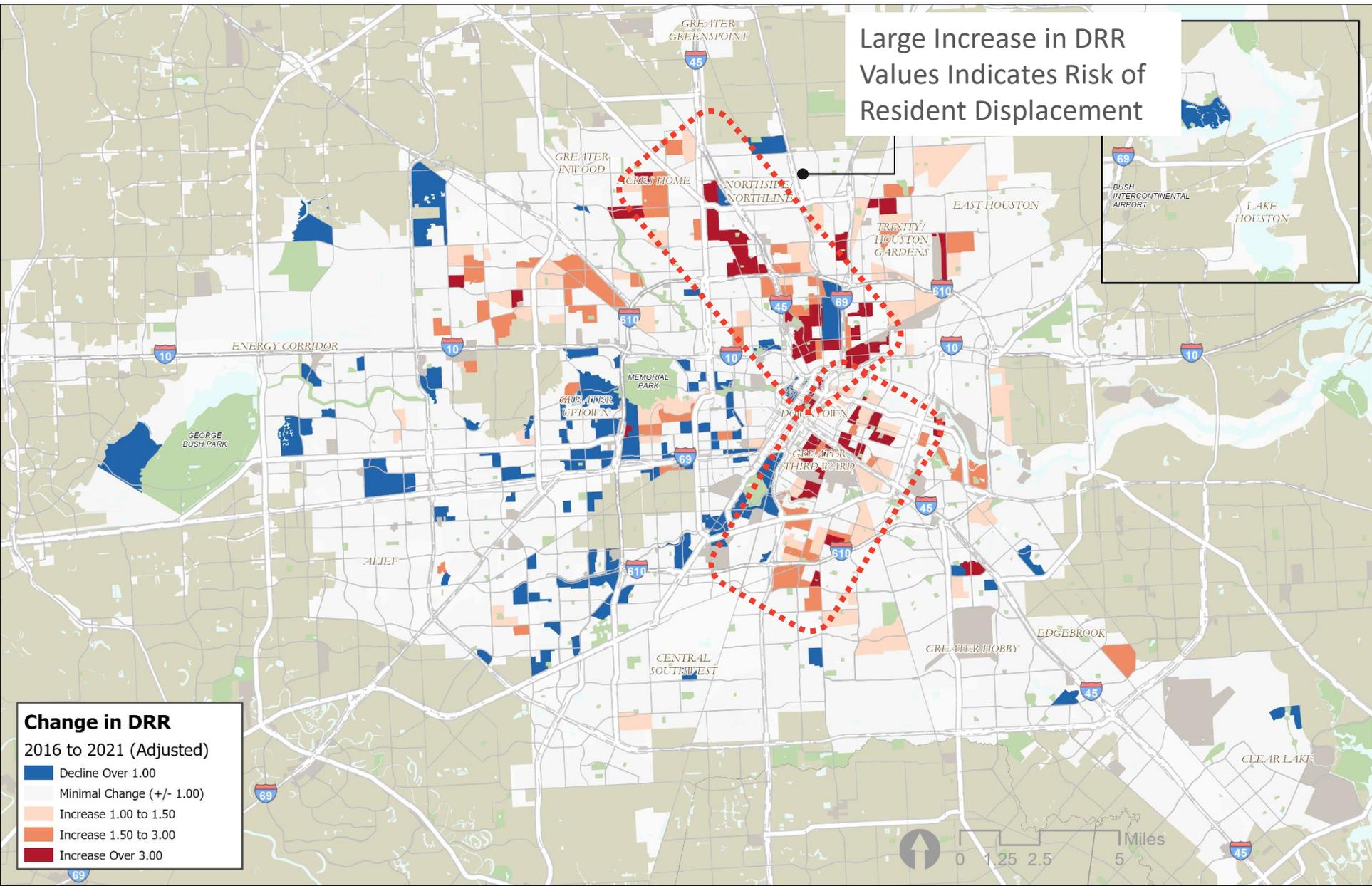
MVA and Change in DRR Values

Legend:

	Strong Market	Middle Market	Weak Market
High Pressure			
Stable Area			
Lagging Market			
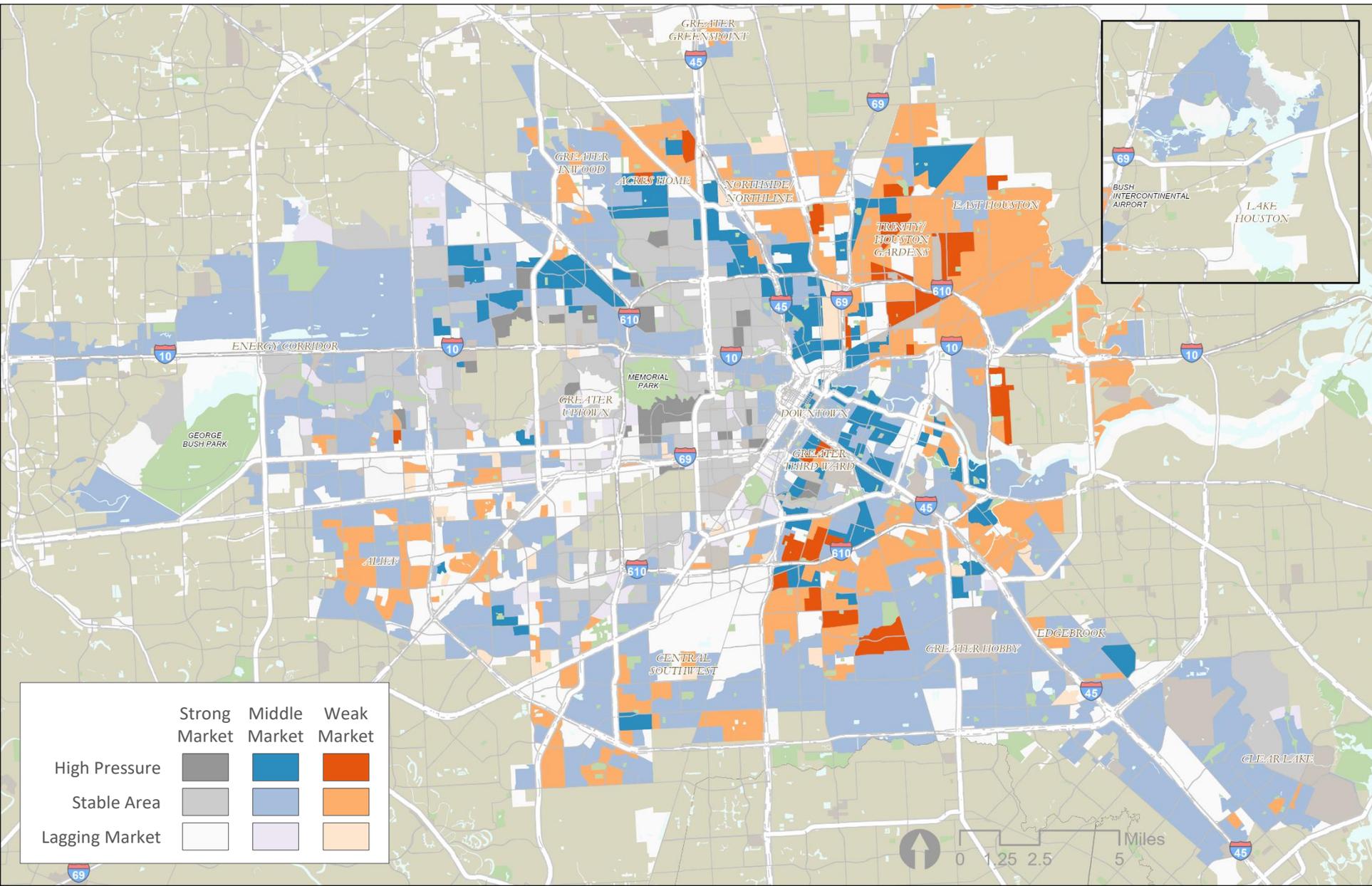
Identifying Priority Areas
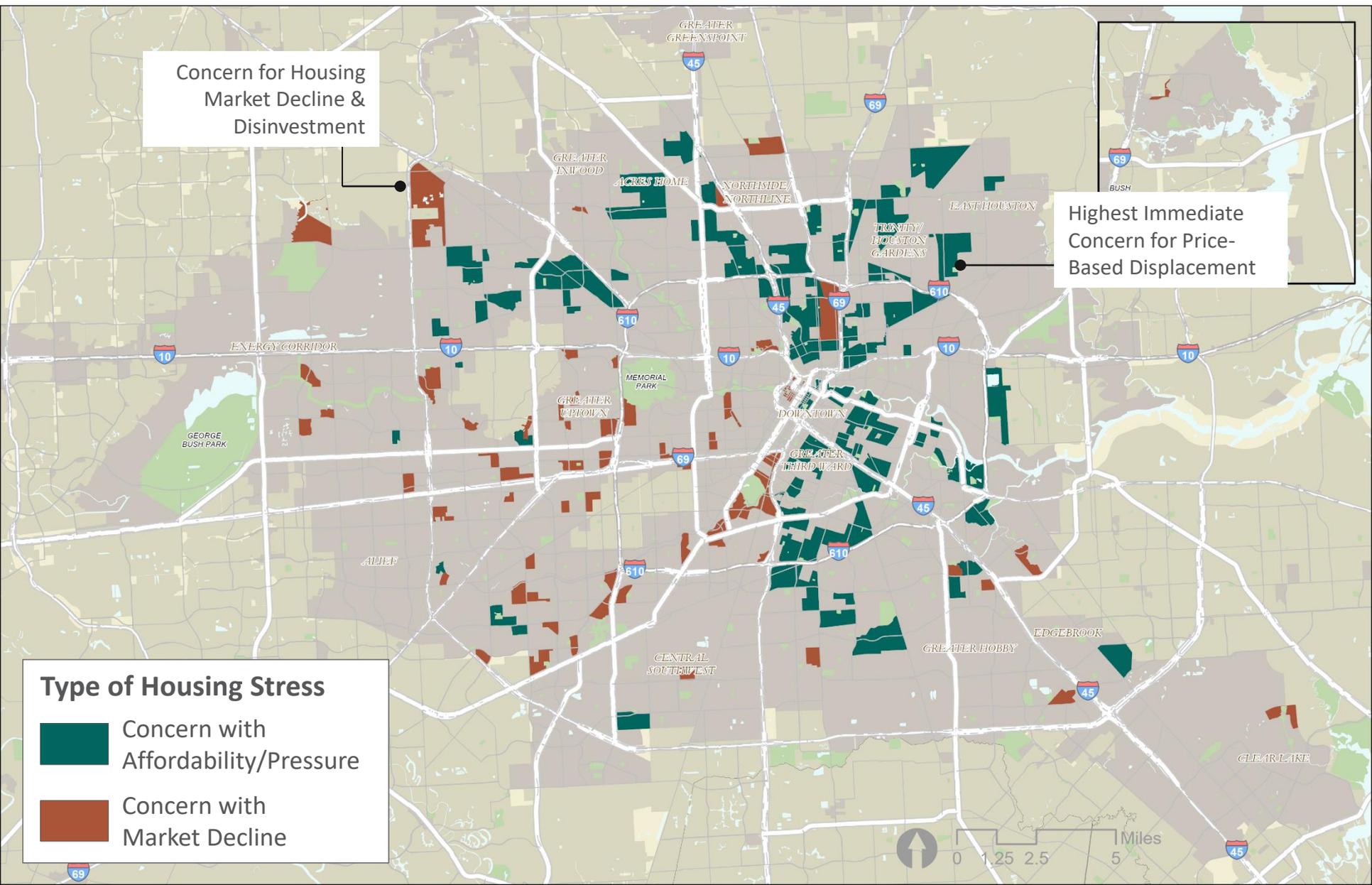
Concern for Housing Market Decline & Disinvestment

Highest Immediate Concern for Price-Based Displacement

Type of Housing Stress

Concern with Affordability/Pressure

Concern with Market Decline

New Research from Reinvestment Fund

Emily Dowdall,
Policy Director
Emily.Dowdall@reinvestment.com

Jacob L. Rosch,
Senior Policy Analyst
Jacob.Rosch@reinvestment.com

Ira Goldstein,
President Policy Solutions
Ira.Goldstein@reinvestment.com

Marci Monaco-Vavrik,
Policy Analyst
Marci.Monaco-Vavrik@reinvestment.com
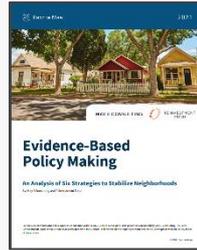
Evidence-Based Policy Making: Six Research-Based Strategies to Stabilize Neighborhoods

https://www.reinvestment.com/insights/evidence-based-policy-making/

Philadelphia Home Appraisal Bias Task Force Report and Recommendations

https://www.reinvestment.com/insights/philadelphia-home-appraisal-bias-task-force-report-and-recommendations/

Investor Home Purchases and the Rising Threat to Owners and Renters: Tales from 3 Cities
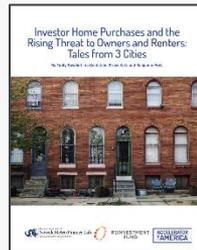
https://www.reinvestment.com/insights/investor-home-purchases-and-therising-threat-to-owners-and-renters-tales-from-3-cities/
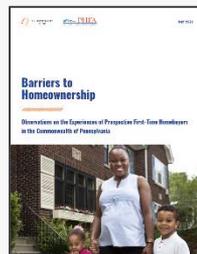
Barriers to Homeownership: Observations and Experiences of Prospective First-Time Homebuyers in the Commonwealth of Pennsylvania

https://www.reinvestment.com/insights/barriers-to-homeownership/

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