







Market Value Analysis (MVA): Allegheny County, PA / City of Pittsburgh

December 14, 2021

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 \$2.4 billion in cumulative investments and loans.
- We are supported by 880 investors that include individuals, foundations, religious institutions, financial institutions, civic organizations and government.
- How we work:





Policy Solutions



PolicyMap





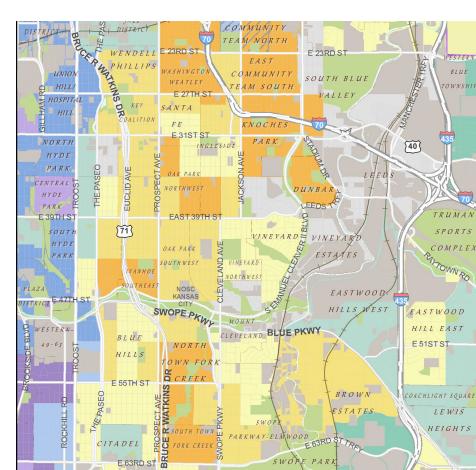
What is the Market Value Analysis?

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.



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	Pittsburgh, PA	
Atlantic City Area, NJ	Jacksonville, FL	Prince George's County, MD	
Baltimore, MD	Kansas City, MO	Reading Area, PA	
Bethlehem, PA	Milwaukee, WI	Richmond, VA	
Camden, NJ	Mt. Vernon, NY	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	Philadelphia, PA	Wilmington, DE	



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



The MVA Process

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

Manually inspect and validate data layers by driving through the area.

Use statistical cluster analysis to identify areas with common attributes.

Manually inspect areas for conformity with local experts to assess fit.

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

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.

Iterative

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.

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)



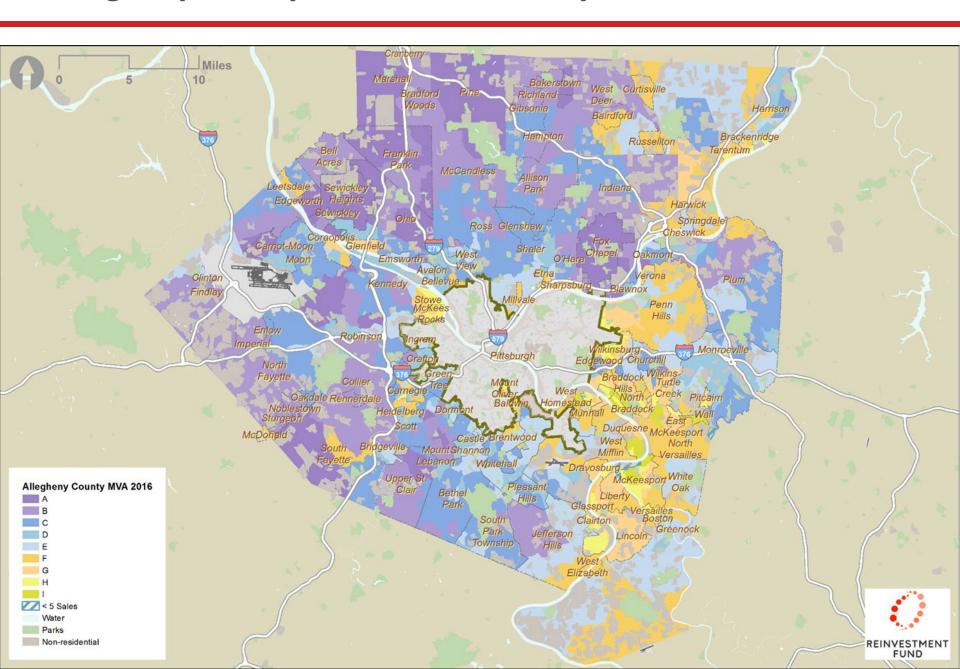


Pittsburgh and Allegheny County MVAs

Allegheny County 2016 Cluster Characteristics

Cluster Letter	Number of Block Groups	Median Sales Price 2013 - 2015	Variance Sales Price 2013 - 2015	Percent Owner Occupied 2010 - 2014	Percent Residential Vacancy Q2 2015 – Q1 2016	Percent Subsidized Housing Units	Percent Parcels Built Post 2008	Percent Foreclosures 2013 - 2015 (of Owner Occupied Households)	Percent of Parcels in Poor or Worse Condition 2012
А	33	\$434,228	0.48	87.9%	0.6%	0.2%	12.0%	0.8%	0.2%
В	95	\$239,494	0.47	80.2%	0.9%	0.8%	4.7%	1.0%	0.2%
С	154	\$161,616	0.43	84.9%	0.9%	0.9%	1.5%	1.4%	0.2%
D	81	\$110,132	0.44	41.3%	3.2%	5.1%	0.7%	2.9%	0.3%
E	127	\$104,787	0.47	84.5%	1.8%	1.1%	0.8%	2.4%	0.5%
F	112	\$65,431	0.58	70.2%	3.5%	4.8%	0.3%	3.3%	0.8%
G	73	\$36,420	0.67	53.7%	7.3%	8.5%	0.3%	5.6%	1.6%
Н	46	\$19,304	0.81	44.3%	12.6%	13.9%	0.3%	6.1%	5.4%
_	26	\$9,510	1.09	49.2%	17.4%	15.4%	0.5%	4.4%	9.9%
Avg.	83	\$130,474	0.54	70.5%	3.6%	9.4%	1.7%	2.7%	1.2%

Allegheny County Market Value Analysis Model



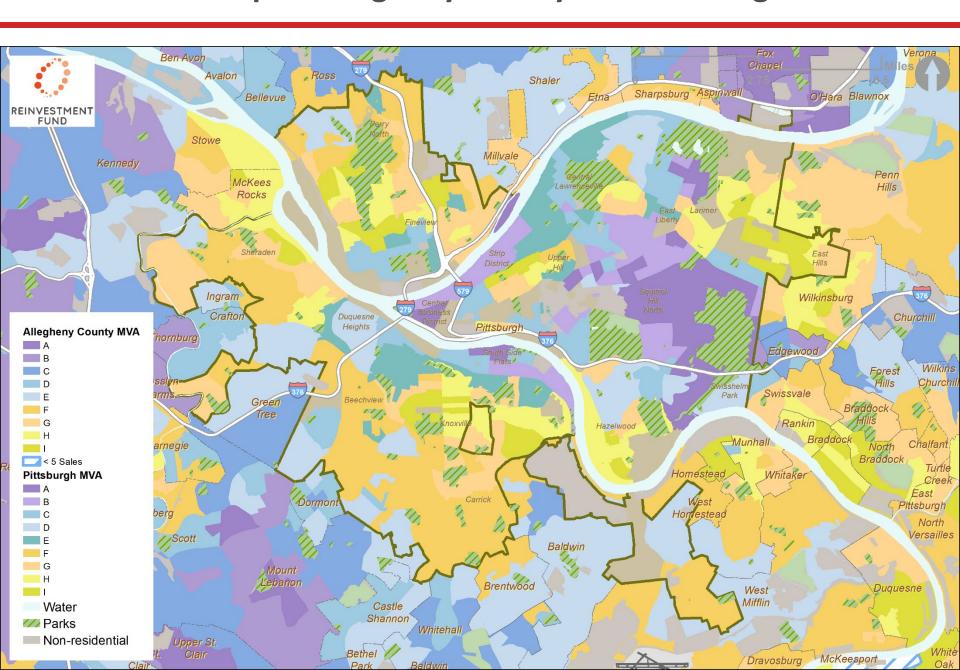
Selected Characteristics of Allegheny County and Pittsburgh MVA Markets

Pittsburgh Cluster Letter	Median Sales Price 2013q34 – 2016q12	Percent Owner Occupied	Percent Foreclosures 2013 - 2015 (Owner Occ. Households)	Percent Poor or Worse Condition Parcels
А	\$404,230	60.2%	1.0%	0.5%
В	\$228,045	23.6%	1.5%	0.5%
С	\$134,783	37.1%	3.5%	2.4%
D	\$122,335	78.8%	2.0%	1.4%
E	\$75,396	44.7%	3.2%	4.2%
F	\$65,096	69.2%	3.3%	1.5%
G	\$37,344	50.0%	5.0%	5.7%
н	\$20,416	52.7%	4.7%	7.0%
1	\$9,933	54.3%	3.7%	9.0%

Allegheny County Cluster Letter	Median Sales Price 2013 - 2015	Percent Owner Occupied	Percent Foreclosures 2013 - 2015 (Owner Occ. Households)	Percent Poor or Worse Condition Parcels
Α	\$434,228	87.9%	0.8%	0.2%
В	\$239,494	80.2%	1.0%	0.2%
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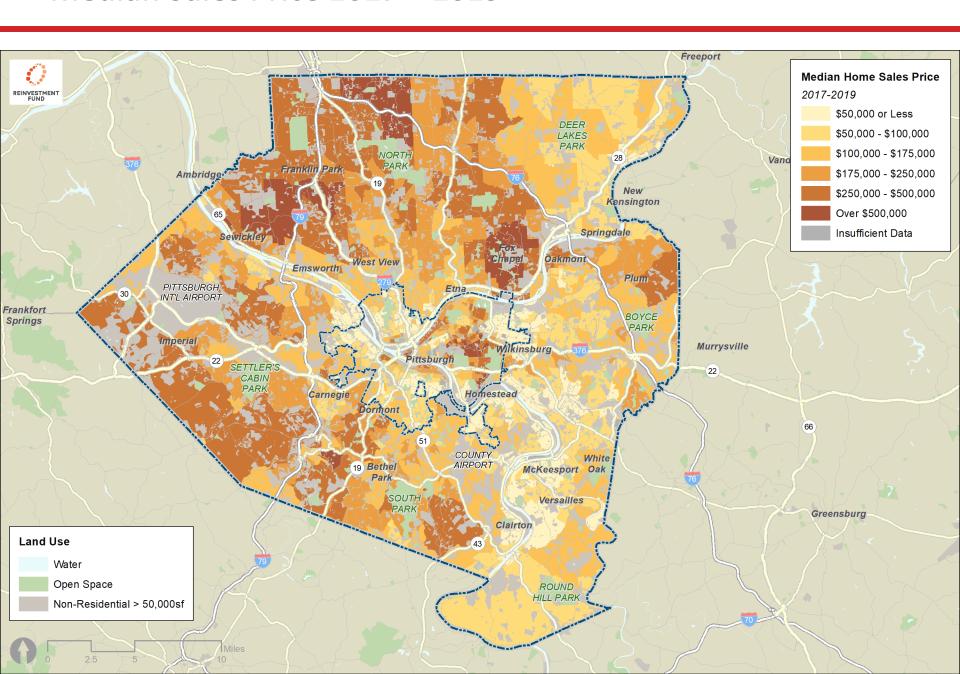
Combined Map of Allegheny County and Pittsburgh MVAs



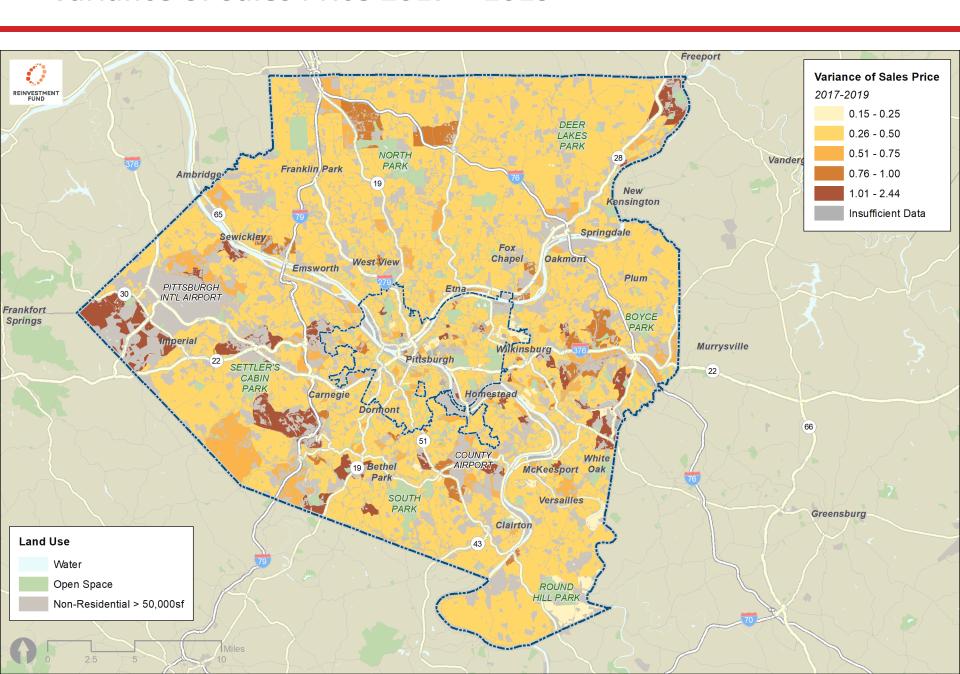


Market Value Analysis 2021

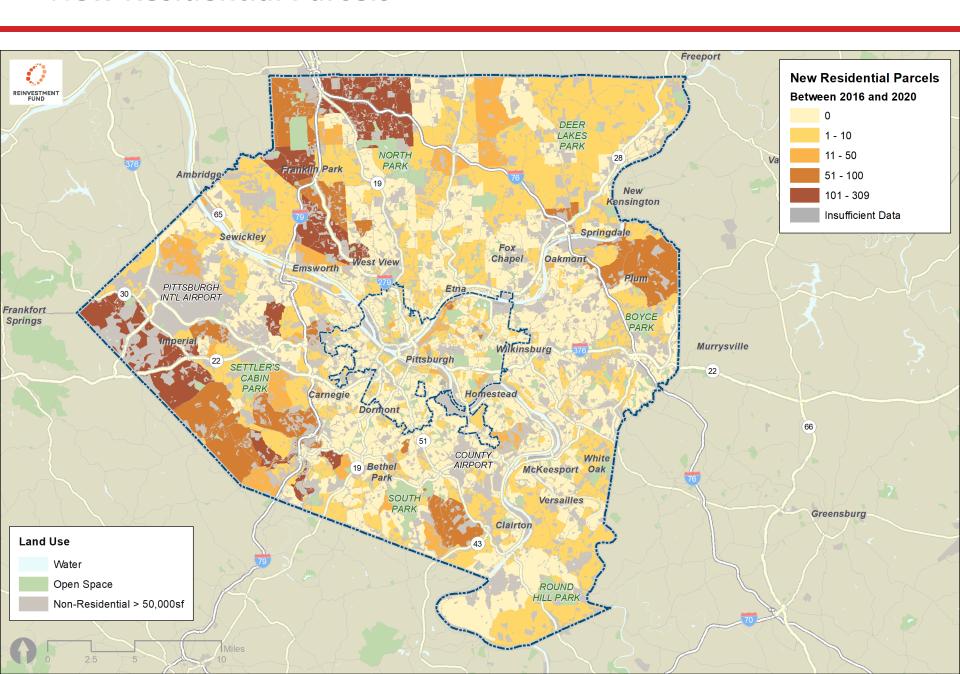
Median Sales Price 2017 – 2019



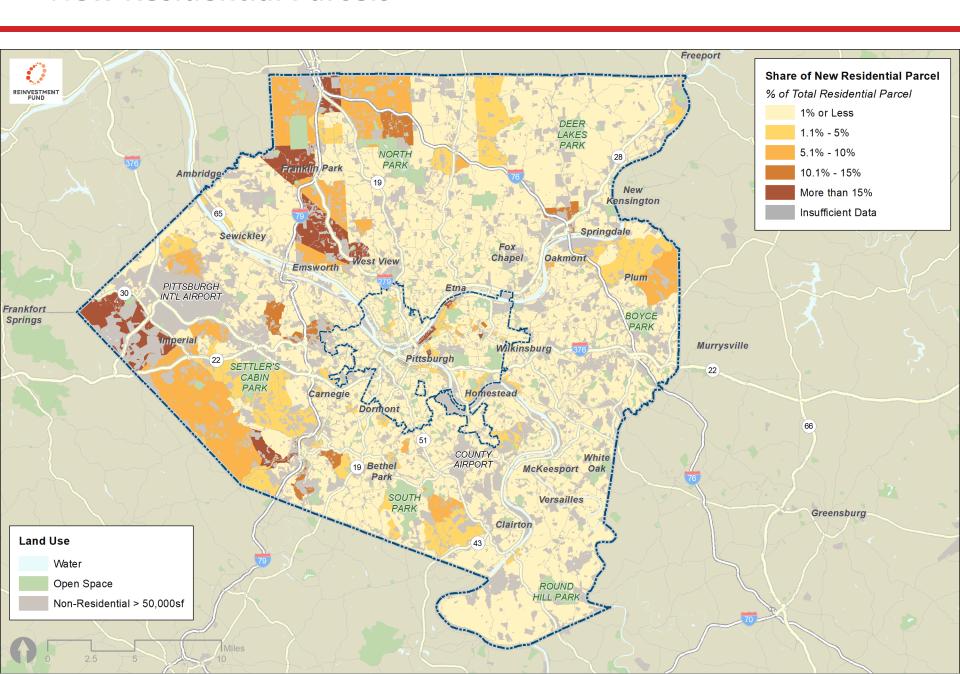
Variance of Sales Price 2017 – 2019



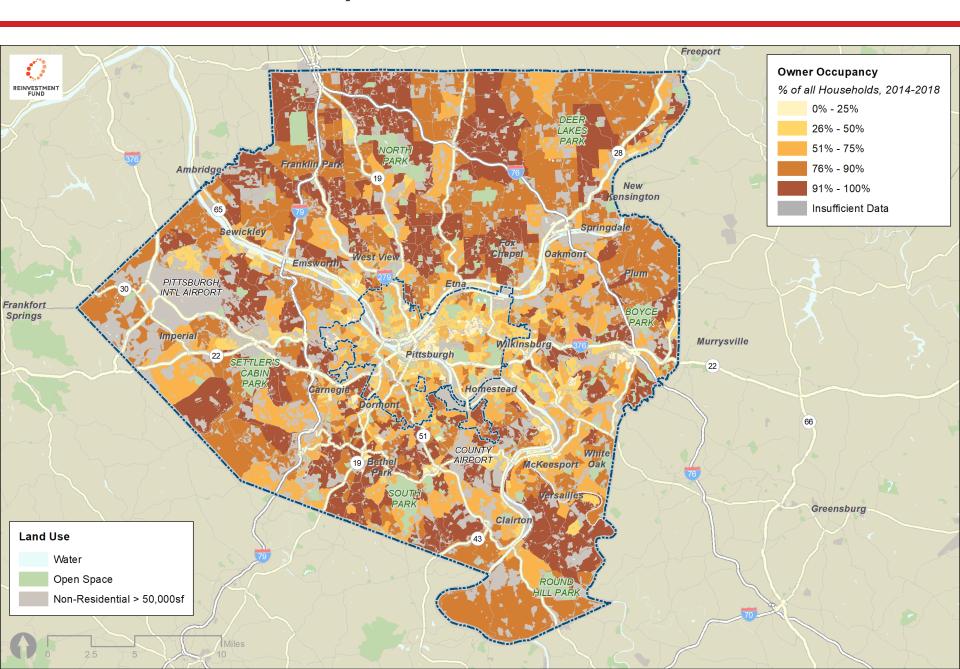
New Residential Parcels



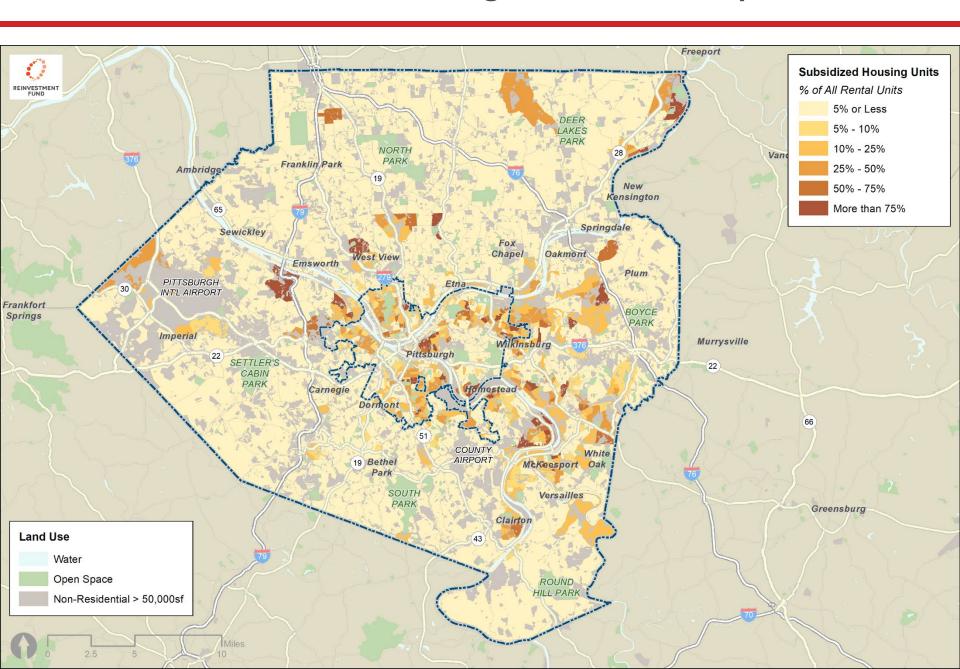
New Residential Parcels



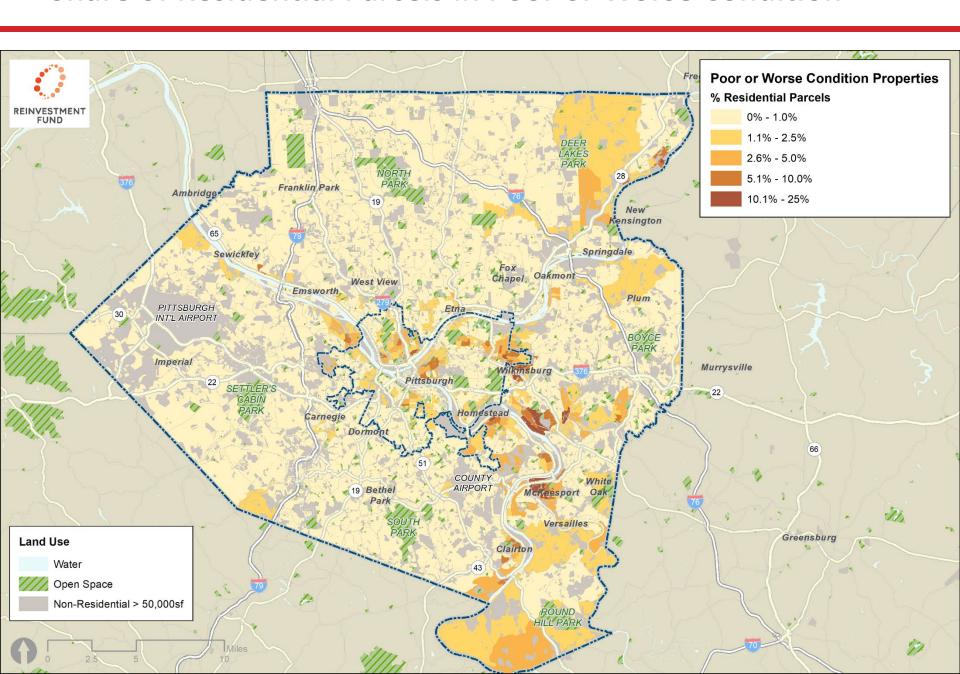
Percent Owner Occupied Households



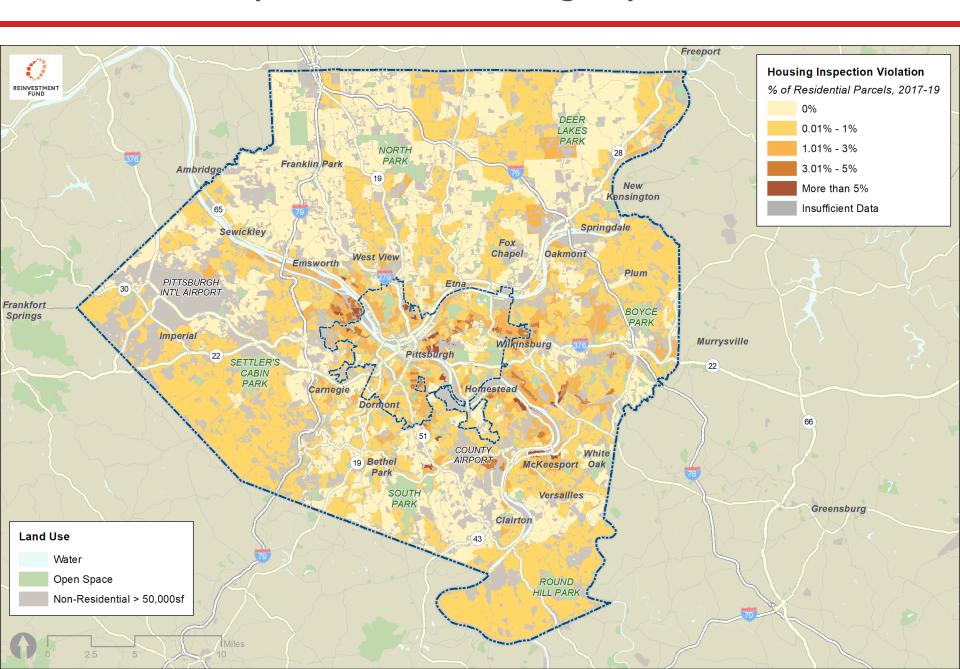
Subsidized Units as a Percentage of Renter Occupied Units



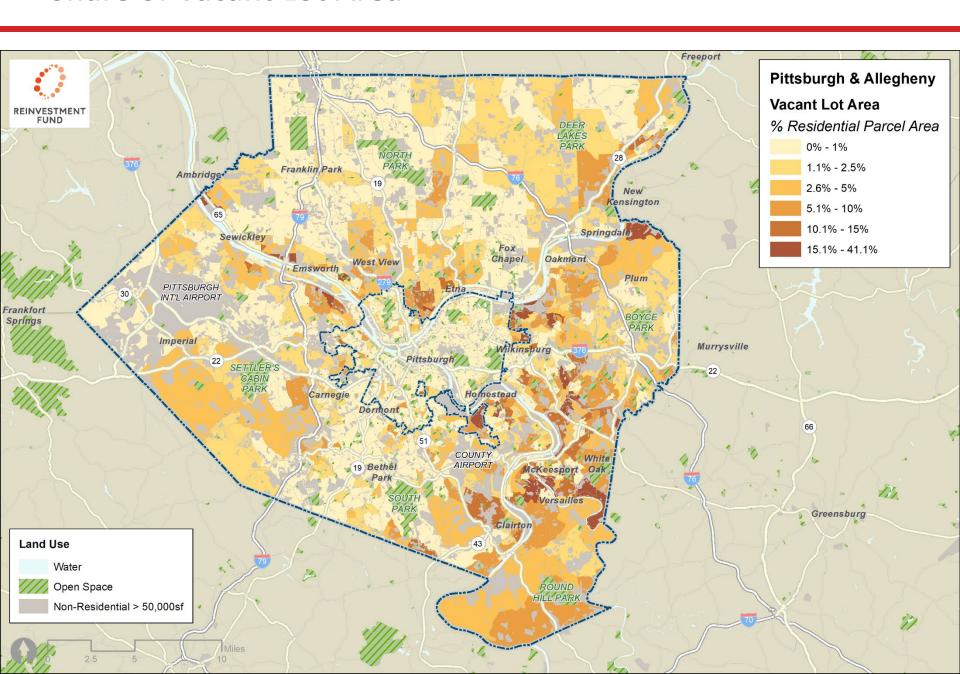
Share of Residential Parcels in Poor or Worse Condition



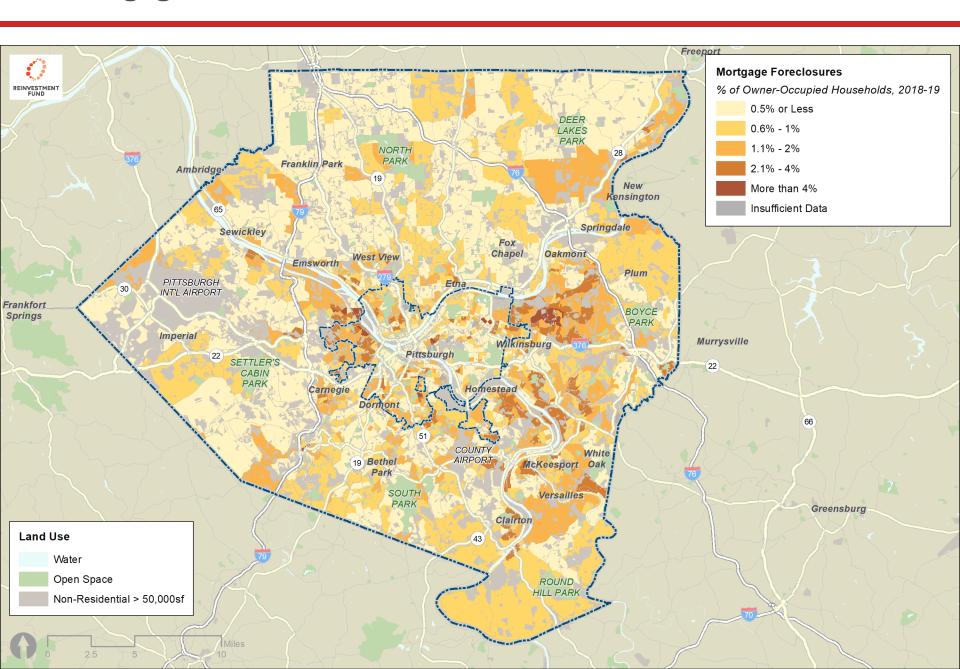
Percent of Properties with a Housing Inspection Violation



Share of Vacant Lot Area



Mortgage Foreclosures



Owners

78%

43%

89%

40%

81%

62%

62%

51%

48%

44%

65%

Price, 17-19

\$460,000

\$269,000

\$215,000

\$143,000

\$127,000

\$120,000

\$70,000

\$34,000

\$21,000

\$14,000

\$154,000

Α

В

C

D

Ε

F

G

Н

L

J

Countywide

Average

Block Group

76

113

185

100

196

24

190

122

30

42

Variance

0.47

0.50

0.42

0.50

0.47

0.57

0.63

0.81

0.87

0.94

0.57

Alle	egheny &	Pittsb	ourgh I	Vlarket	Value <i>P</i>	Analysi	S
			Summai	y of Market	Characteris	tics	
BGs	Median Sales	Coef. Of	Home-	Subsidized	New Cons.	Poor or Worse	Buildi

Renters

3%

4%

1%

4%

3%

76%

10%

19%

80%

20%

10%

3.7%

1.2%

0.6%

0.3%

0.2%

0.9%

0.1%

0.1%

>0.1%

>0.1%

0.6%

Vacant

Lot Area

0.4%

0.4%

1.3%

1.0%

3.0%

2.8%

3.0%

3.4%

3.3%

2.6%

2.1%

Foreclosure

0.6%

0.8%

0.7%

1.5%

1.4%

1.3%

2.2%

2.6%

2.4%

2.4%

1.5%

ling

Violations

0.1%

0.7%

0.2%

1.0%

0.3%

0.8%

0.9%

1.9%

2.5%

2.0%

0.8%

Condition

0.1%

0.3%

0.1%

0.5%

0.5%

1.5%

1.1%

2.4%

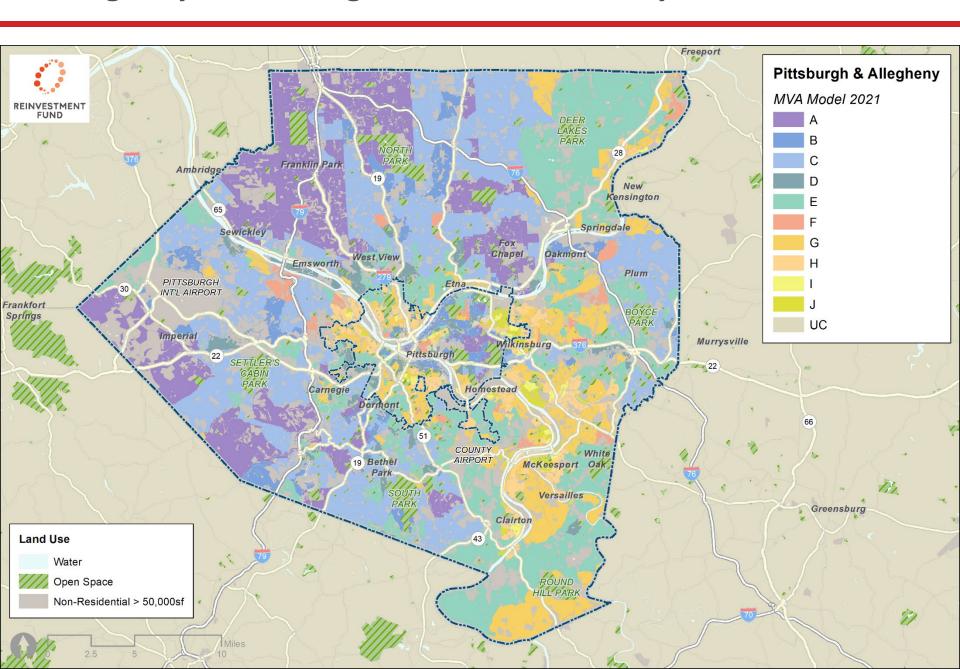
6.5%

6.8%

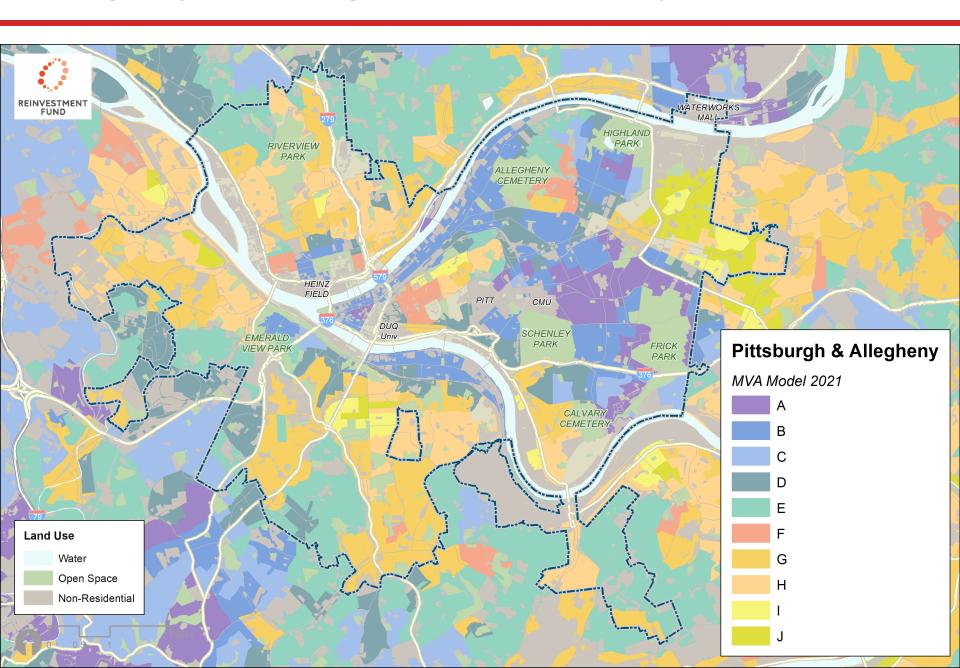
1.1%

Allegheny & Pittsburg	h Market	Value Analysis	
Sum	mary of Market	Characteristics	

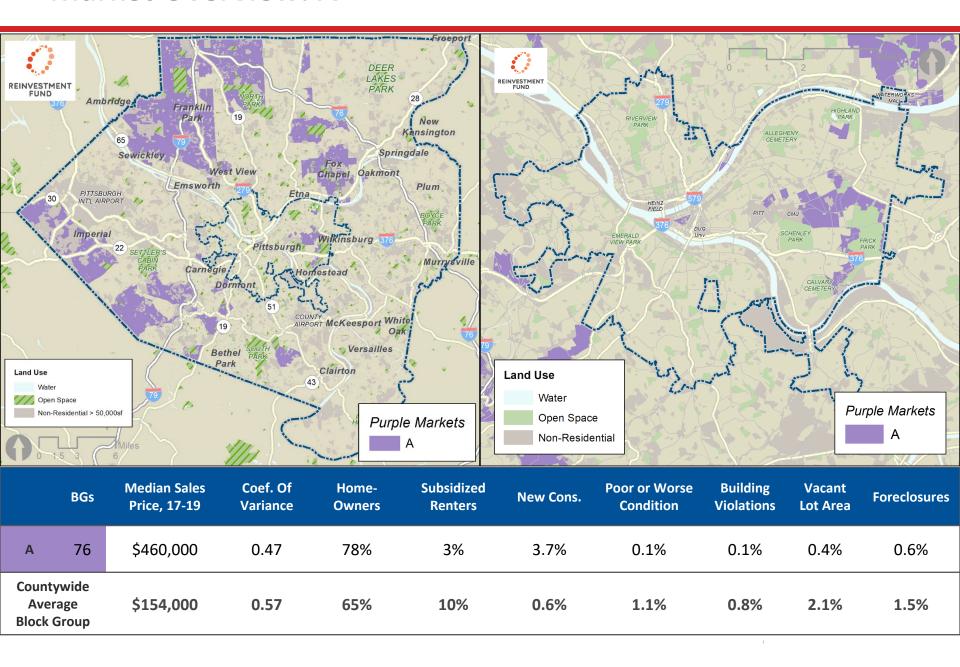
Allegheny & Pittsburgh Market Value Analysis



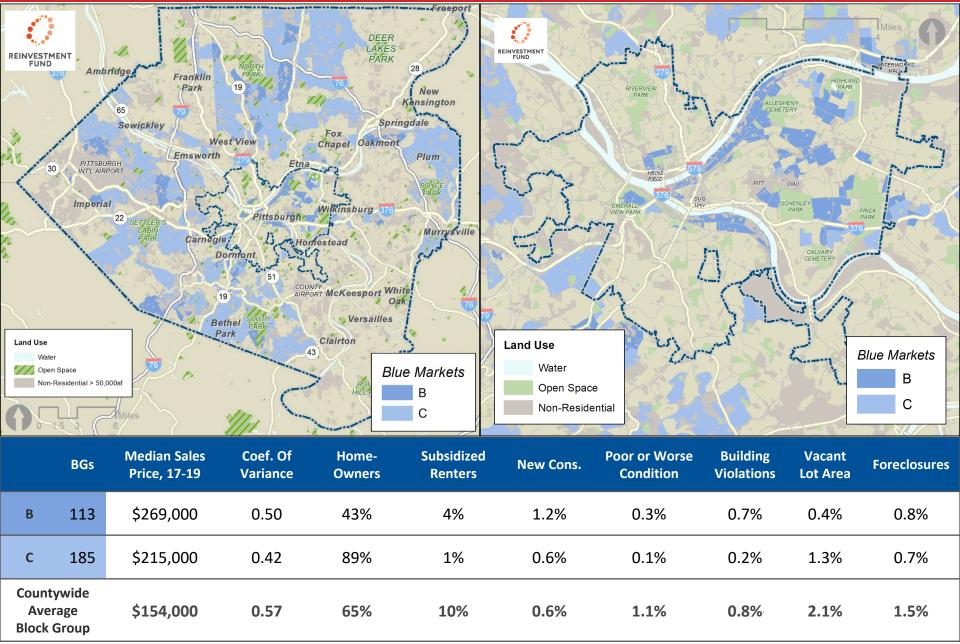
Allegheny & Pittsburgh Market Value Analysis



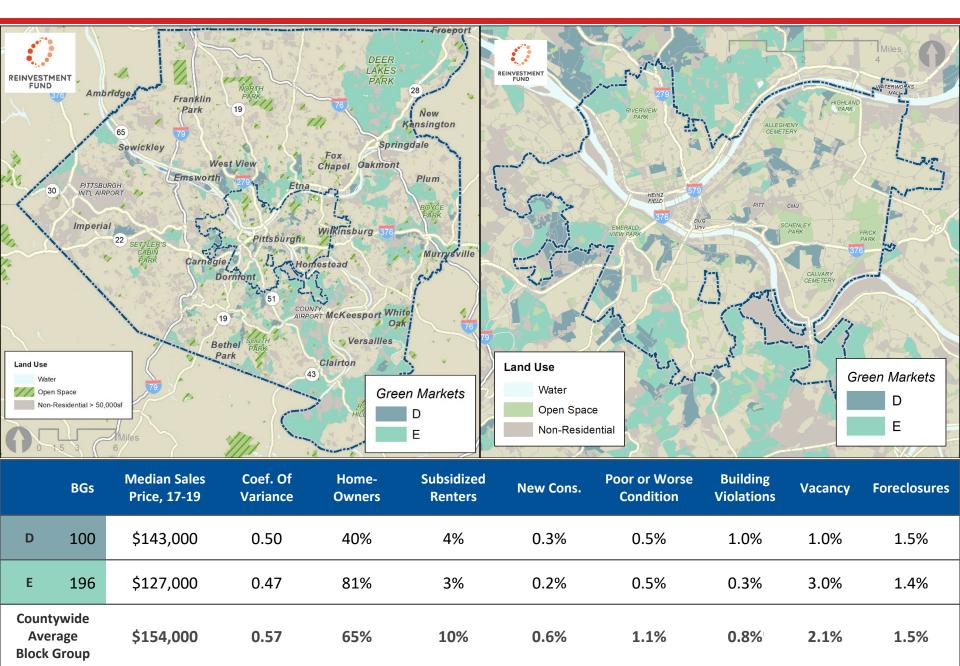
Market Overview: A



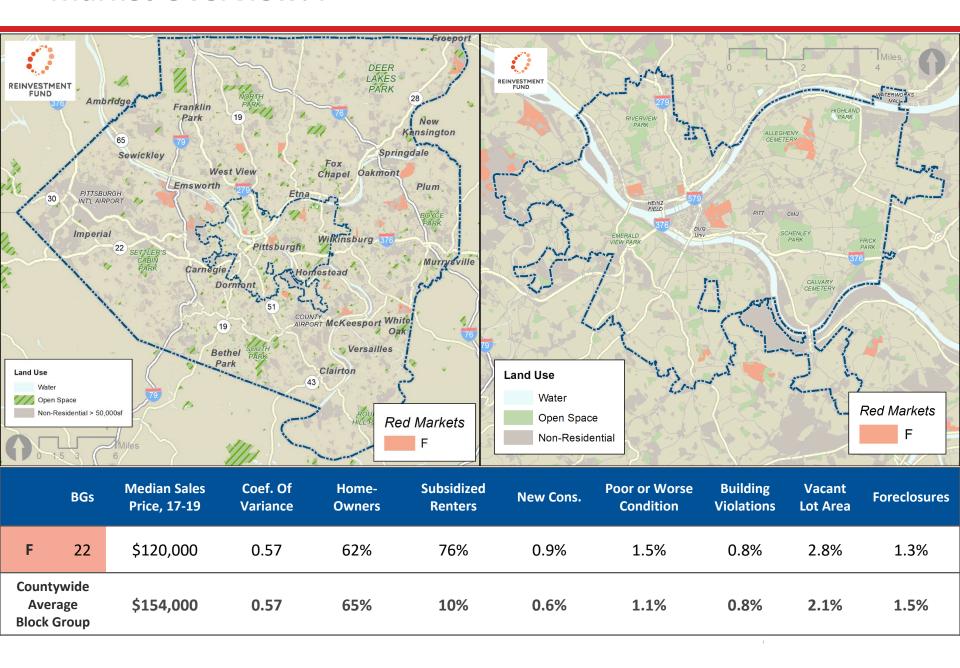
Market Overview: B and C



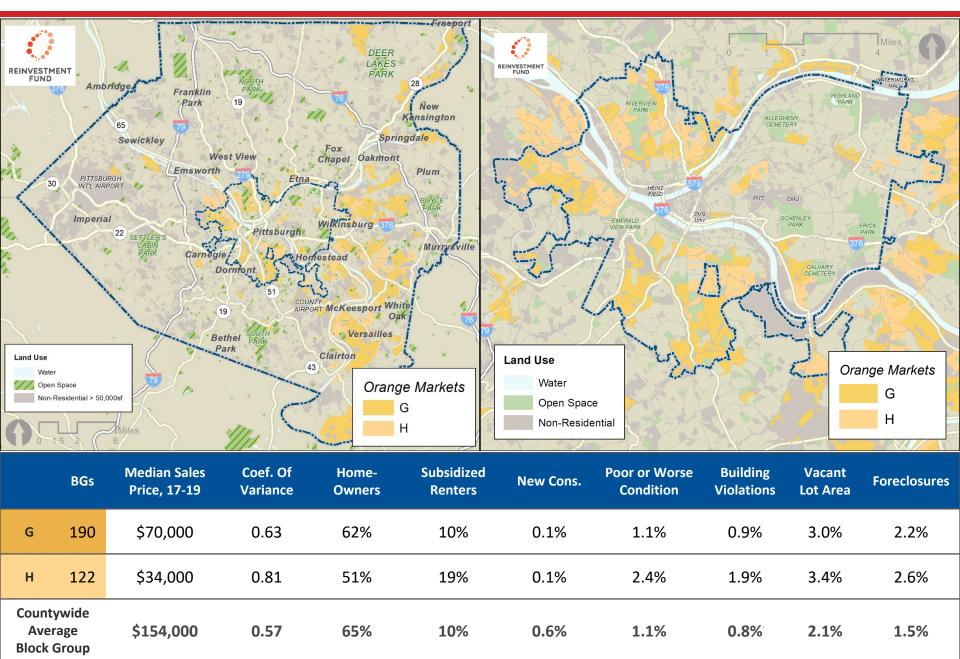
Market Overview: D and E



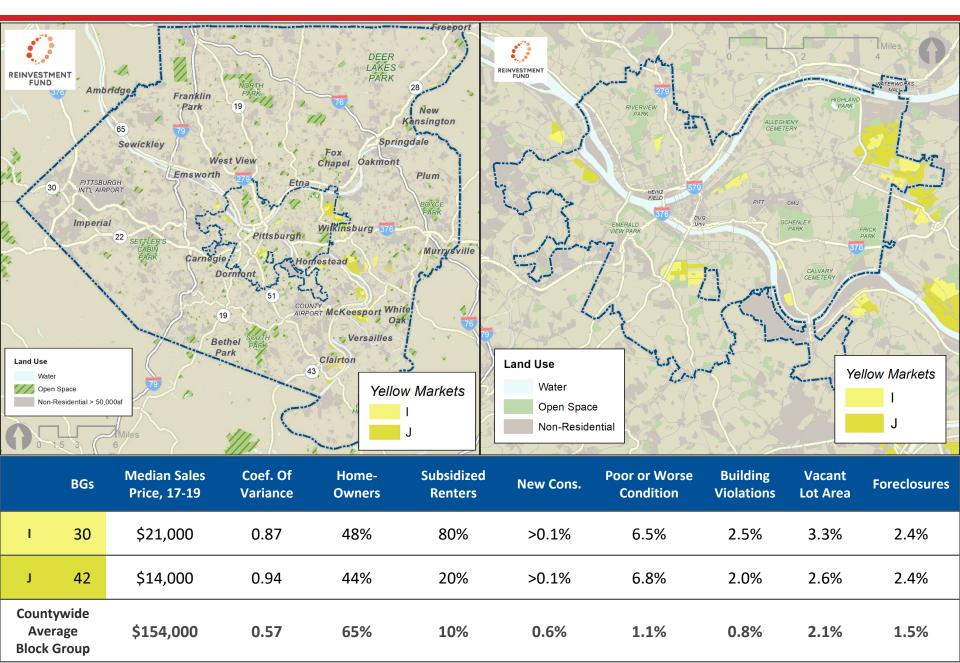
Market Overview: F



Market Overview: G and H



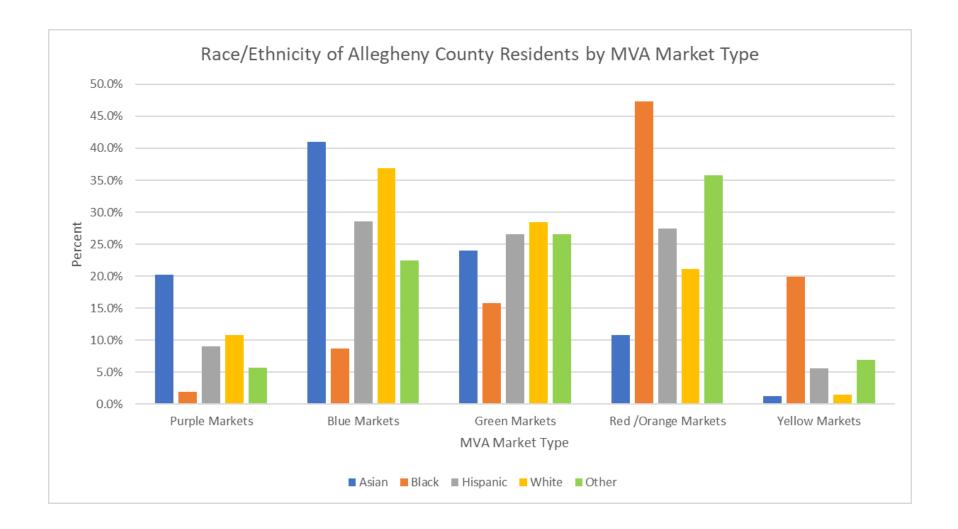
Market Overview: I and J



Demographic Overview

Total				Race/Ethnic	city			Average Median Household
		Population, 2015-2019	Asian	Black	Hispanic	White	Other	Income
Α	76	120,578 (10%)	9,109 (8%)	2,948 (2%)	2,337 (2%)	104,074 (86%)	2,108 (2%)	\$130,644
В	113	134,101 (11%)	11,202 (8%)	7,970 (6%)	3,559 (3%)	108,133 (81%)	3,241 (2%)	\$67,976
С	185	267,610 (21%)	7,279 (3%)	5,549 (2%)	3,792 (1%)	246,038 (92%)	4,990 (2%)	\$92,337
D	100	108,679 (9%)	7,400 (7%)	11,154 (10%)	3,326 (3%)	82,238 (76%)	4,561 (4%)	\$51,623
E	196	215,748 (17%)	3,440 (2%)	13,380 (6%)	3,522 (2%)	190,222 (88%)	5,185 (2%)	\$65,655
F	24	29,043 (2%)	398 (1%)	7,811 (27%)	548 (2%)	18,933 (65%)	1,360 (5%)	\$53,880
G	190	168,034 (13%)	3,135 (2%)	30,354 (18%)	3,843 (2%)	123,948 (74%)	6,781 (4%)	\$49,330
н	122	103,576 (8%)	1,347 (1%)	35,091 (34%)	2,684 (3%)	59,453 (57%)	5,007 (5%)	\$37,406
1	30	21,165 (2%)	349 (2%)	13,132 (62%)	472 (2%)	6,335 (30%)	877 (4%)	\$26,995
J	42	28,971 (2%)	226 (1%)	17,730 (61%)	978 (3%)	8,389 (29%)	1,648 (6%)	\$32,413
uc	36	24,230 (2%)	1,206 (5%)	9,857 (41%)	716 (3%)	11,504 (47%)	979 (4%)	\$25,762
To	otal	1,250,578 (100%)	45,091 (4%)	154,976 (13%)	25,777 (2%)	959,267 (79%)	36,737 (3%)	\$61,043

Race/Ethnicity of Allegheny County Residents by MVA Market Type

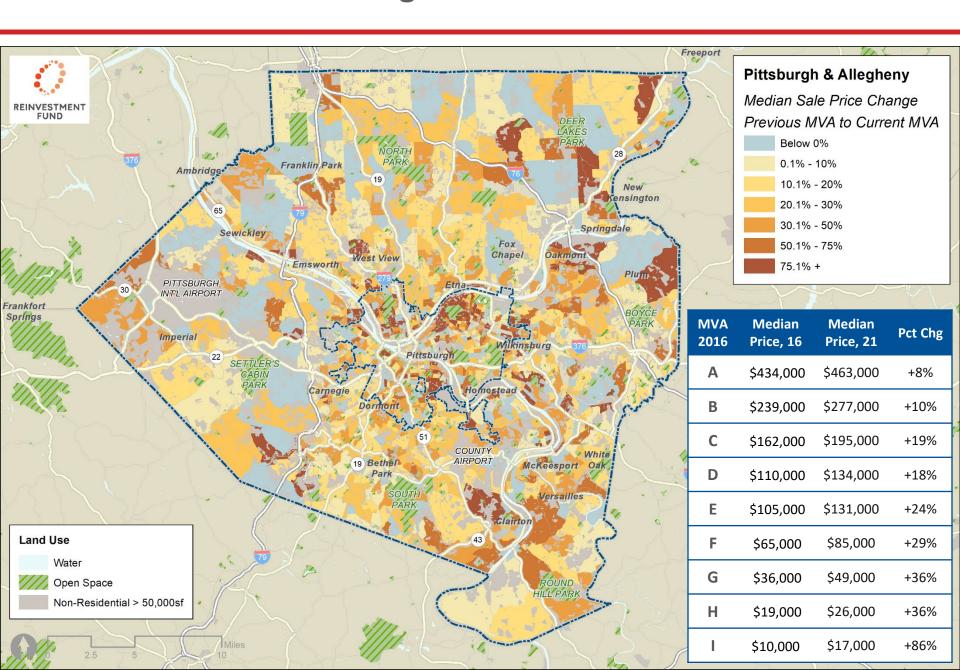




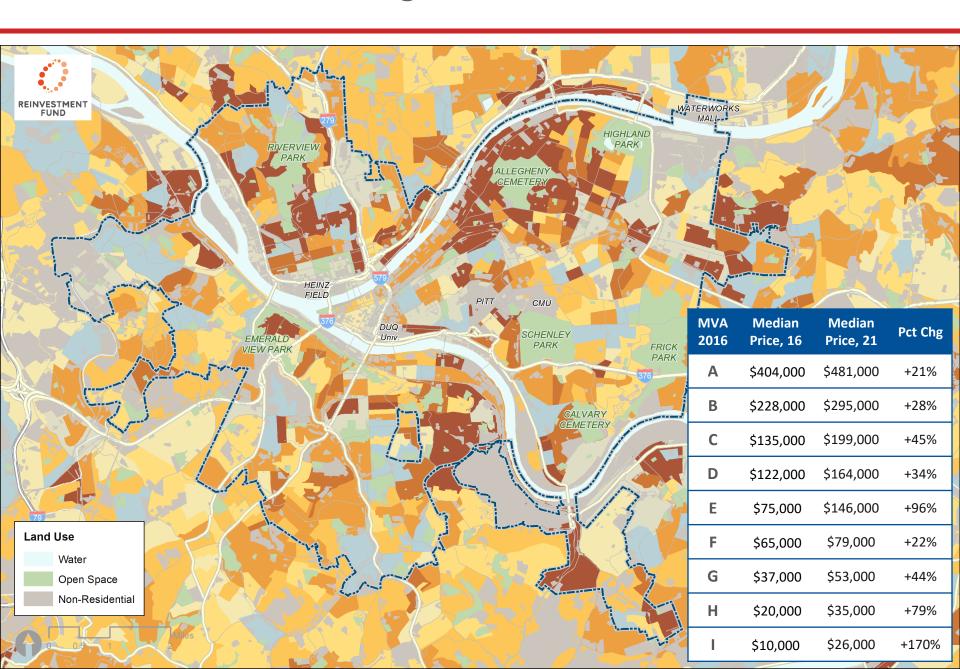


How Have Markets in Pittsburgh Changed Since 2016?

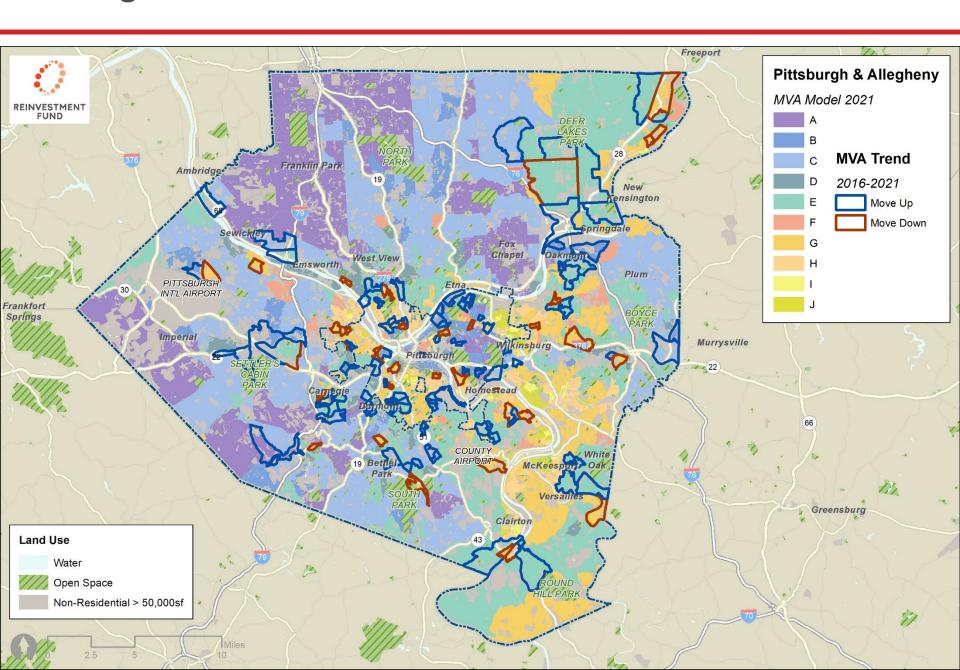
Median Sales Price Change



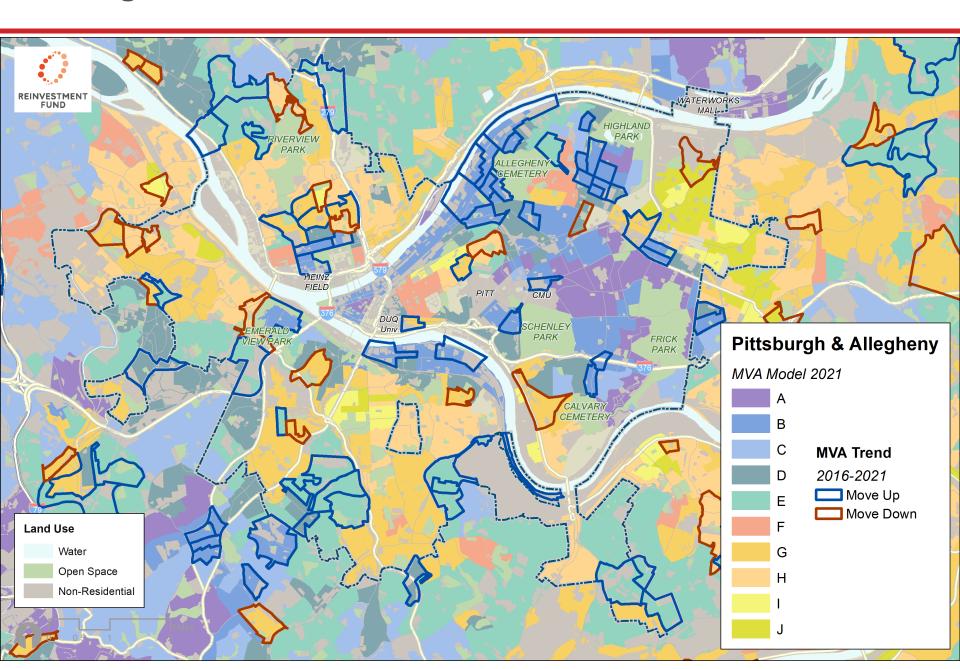
Median Sales Price Change



Change from 2016 to 2021 MVA



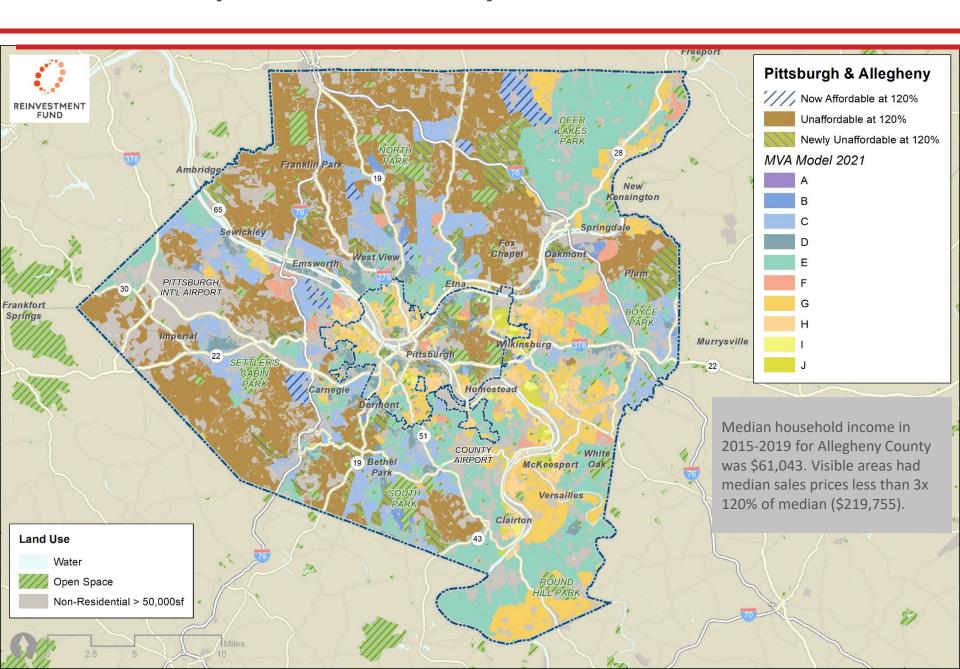
Change from 2016 to 2021 MVA



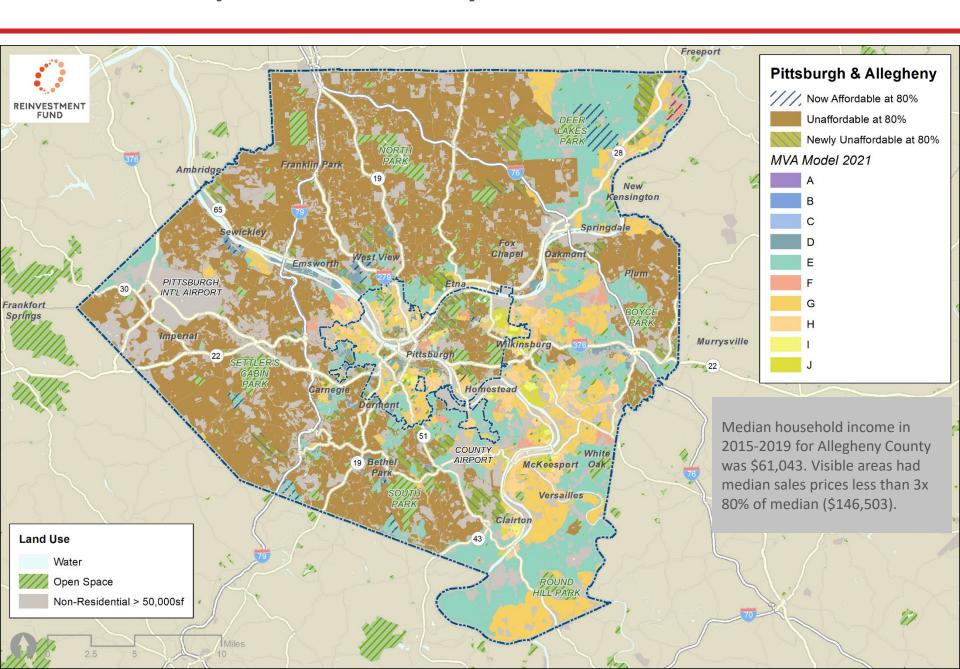


Overlays

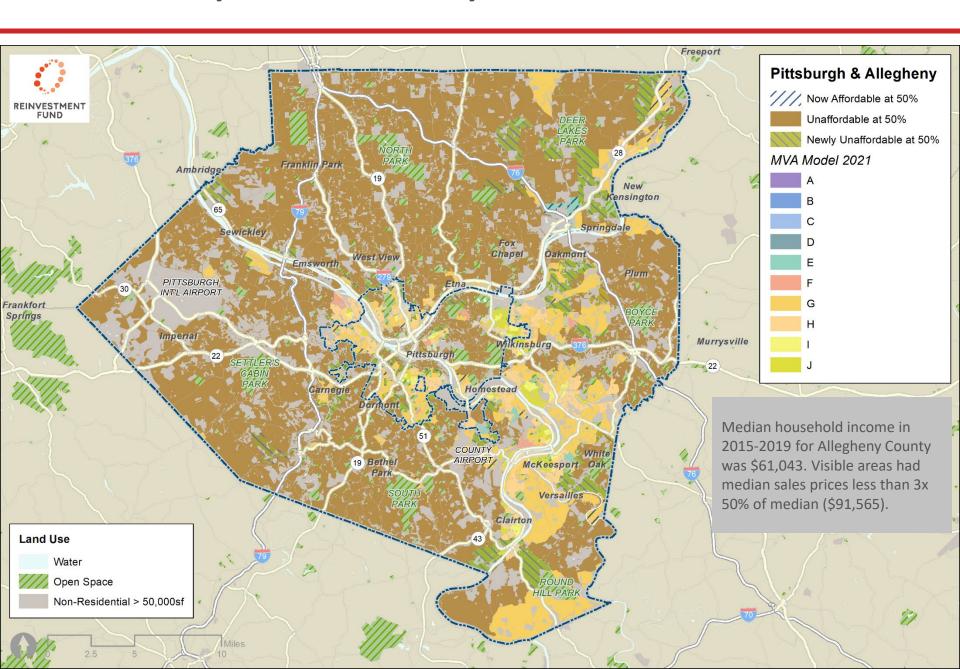
Affordability at 120% of County Median Income



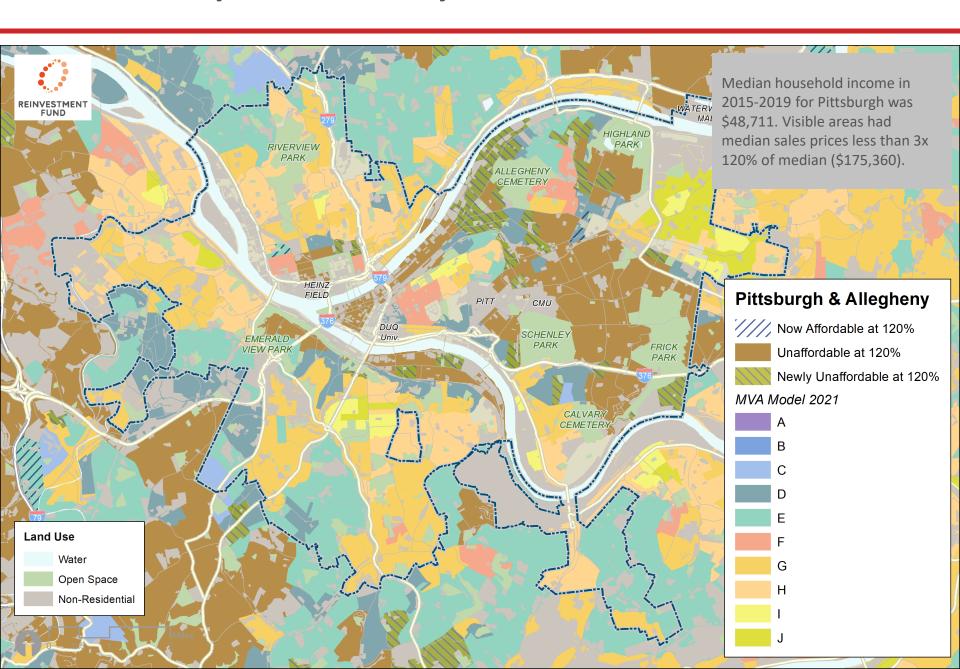
Affordability at 80% of County Median Income



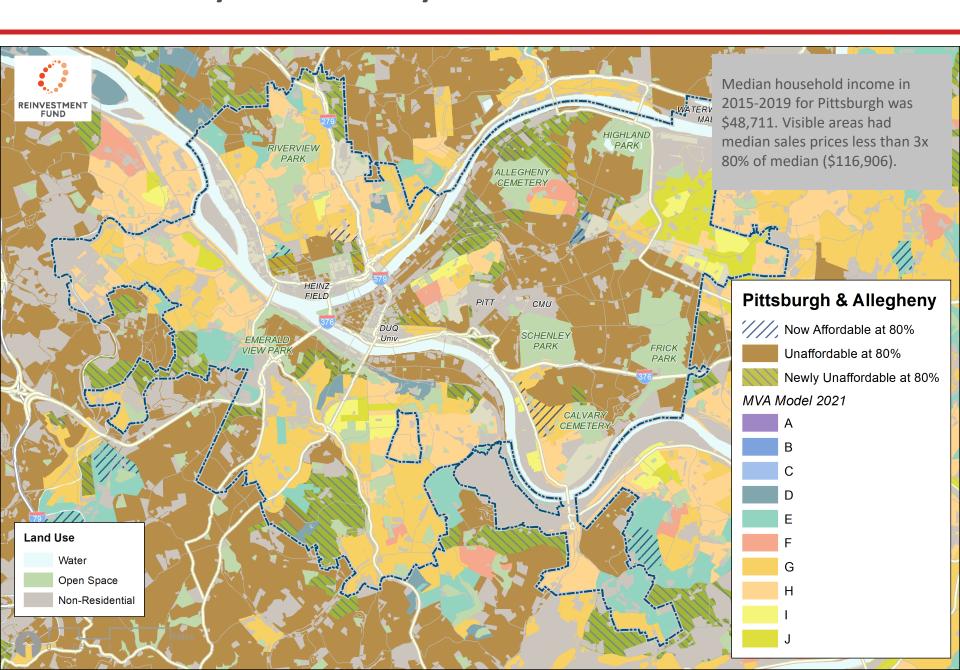
Affordability at 50% of County Median Income



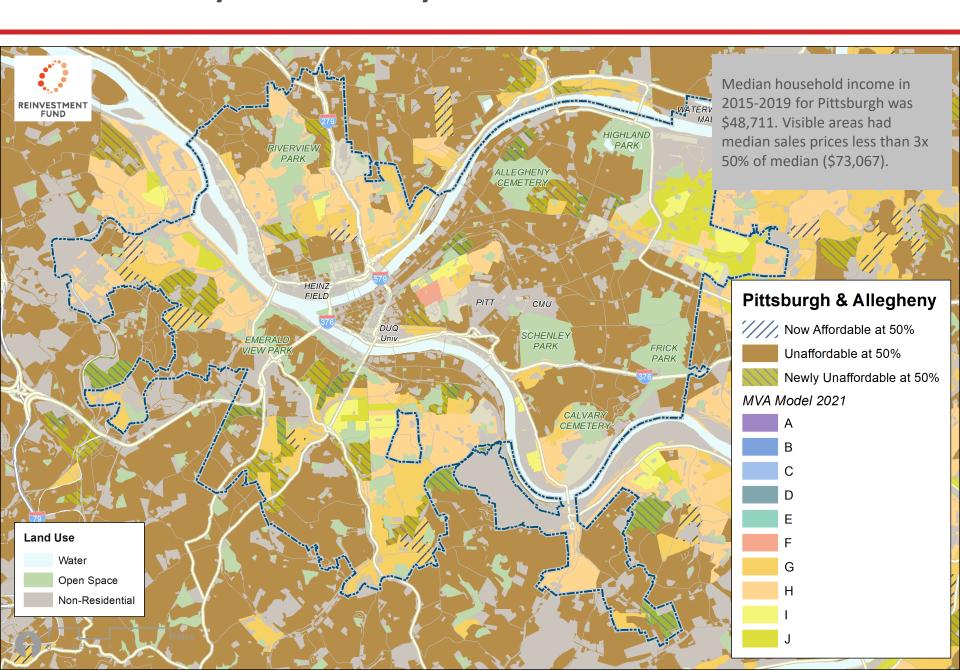
Affordability at 120% of City Median Income



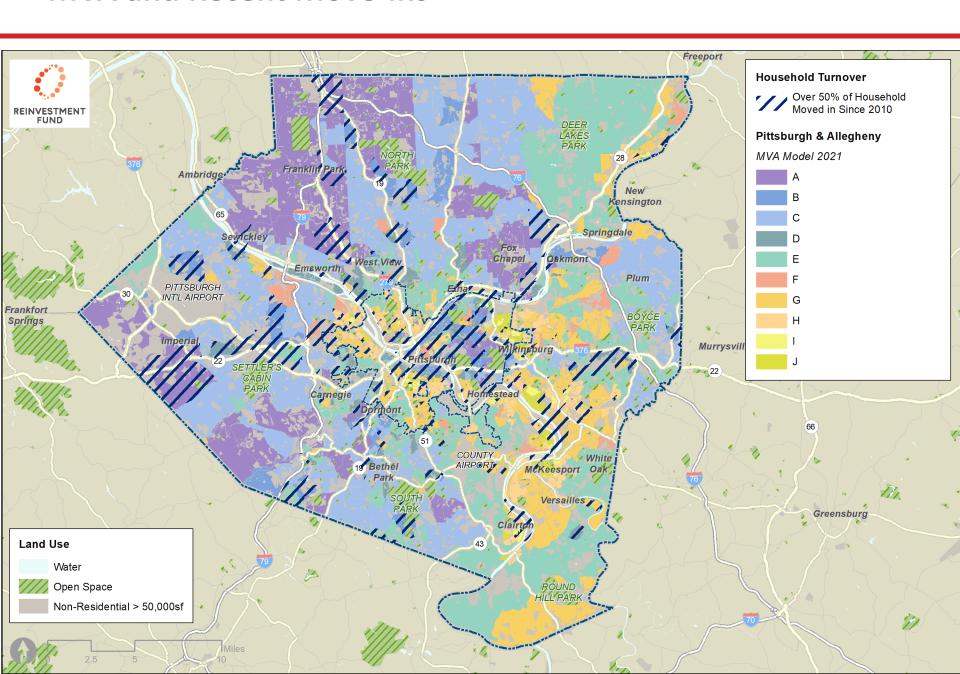
Affordability at 80% of City Median Income



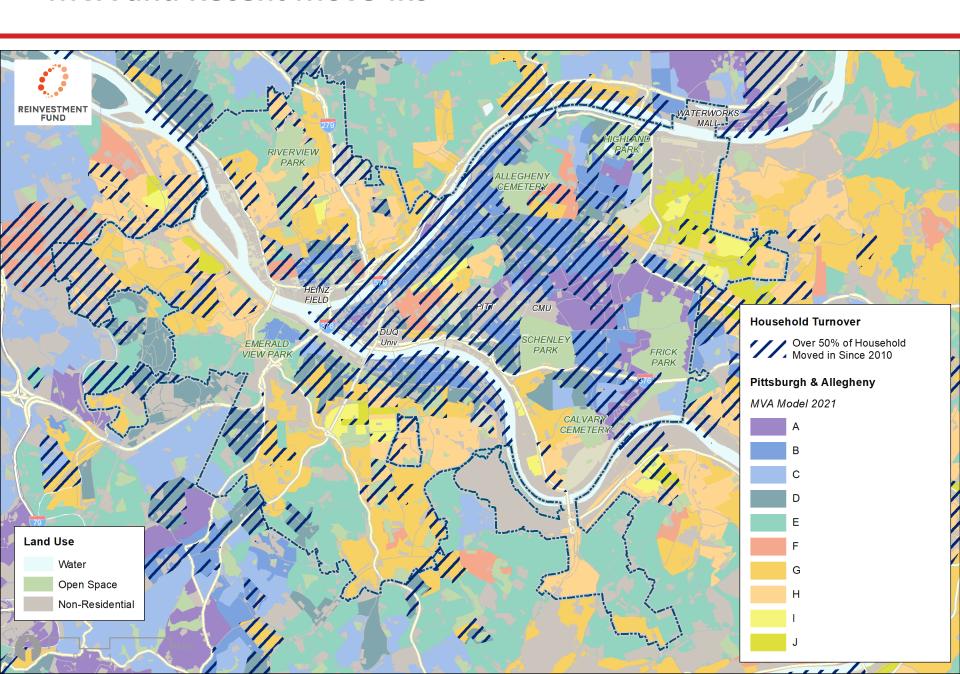
Affordability at 50% of City Median Income



MVA and Recent Move-Ins



MVA and Recent Move-Ins



Analyzing Mortgage Lending Activity

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 Outcomes Vary Substantially Across MVA Market Types

Home Purchase Application Outcomes, 2017-2019

Refinance Application Outcomes, 2017-2019

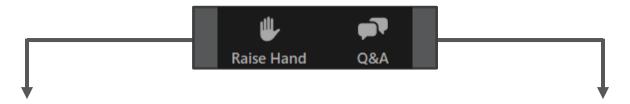
	Originated Loans	Rejected Apps	Withdrawn Apps	Total App	Sales 2017-2019	Purchase Loans as Pct of Sales	•		Originated Loans	Rejected Apps	Withdrawn Apps	Total App
Purple (A)	5,606 (83%)	309 (5%)	858 (13%)	6,773 (100%)	5,434	> 95%		Purple (A)	3,095 (68%)	744 (16%)	702 (15%)	4,541 (100%)
Blue (B, C)	17,678 (82%)	1,155 (5%)	2,778 (13%)	21,611 (100%)	18,470	> 95%		Blue (B, C)	10,972 (65%)	3,172 (19%)	2,698 (16%)	16,842 (100%)
Green (D, E)	11,989 (81%)	1,028 (7%)	1,830 (12%)	14,847 (100%)	13,760	87%		Green (D, E)	7,137 (60%)	2,713 (23%)	1,960 (17%)	11,810 (100%)
Orange (F, G, H)	7,723 (76%)	1,087 (11%)	1,347 (13%)	10,157 (100%)	12,812	60%		Orange (F, G, H)	4,106 (54%)	2,276 (30%)	1,223 (16%)	7,605 (100%)
Yellow (I, J)	264 (66%)	80 (20%)	59 (15%)	403 (100%)	1,277	21%		Yellow (I, J)	184 (33%)	253 (46%)	117 (21%)	554 (100%)
All Markets	43,260 (80%)	3,659 (7%)	6,872 (13%)	53,791 (100%)	51,753	84%		All Markets	25,494 (62%)	9,158 (22%)	6,700 (16%)	41,352 (100%)
i												

^{*}Only includes first lien, home purchase and refinance applications for single family homes

Market Value Analysis Q&A

Please tell us your name and organization when you ask a question.

Attendees' Zoom toolbar provides two options for posing questions to MVA Panel:



Raise Hand

- Attendees can use the "Raise Hang" function to ask their question live over audio
- Attendees will be acknowledged in the order in which their "hand" was raised.
- When prompted by the event host, attendees' audio will be enabled.
 Afterwards, the attendee will again be muted.

Q&A

- Attendees can use the "Q&A" function to type out and submit their question
- Questions submitted via the Q&A will reviewed by the panel and placed in a queue in the order they were received.
- Q&A submissions will be presented to the panel for response once all "Raised Hands". Q&A submissions will also be made visible to attendees at this time



Reinvestment Fund Policy Solutions

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