Richmond Zoning Pattern Book

Photo by Brendan Stephens on Unsplash

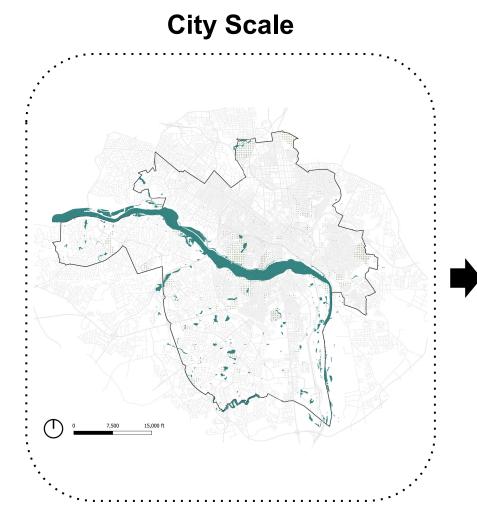


Why a Pattern Book?

In alignment with the Zoning update, key objectives include:

- 1. Identify patterns that will give us information about metrics that need to be regulated, which will inform the zoning reform process
- 2. Communicate to the public why the zoning changes may be necessary to align the regulations with desirable existing built patterns
- 3. Identifying areas with nonconformities. These are areas with existing buildings that would not be legal to build under current zoning regulations.
- 4. Identify areas that have unbuilt zoning capacity, including unbuilt height and lot coverage, that may not be consistent with existing local built patterns.

Multi-scalar analysis

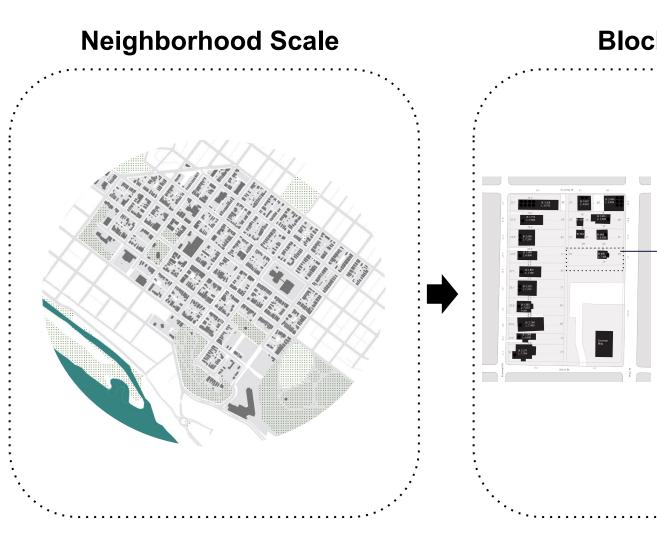


Mapping contextual patterns and misalignments between existing patterns and zoning.

Identify areas with nonconformities and areas with unbuilt zoning capacity

What are the most prevailing types non-conformities visible at the city scale?

RESULT: City-wide misalignments and selection of 10 representative areas to analyze at the neighborhood scale



Mapping misalignments between existing patterns and zoning.

What are the most prevailing types of form non-conformities visible at the neighborhood scale?

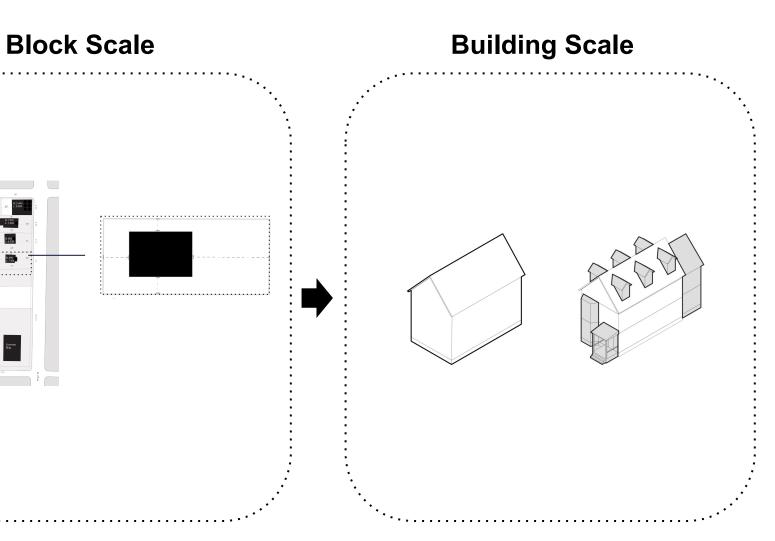
Illustrating misalignments between existing patterns and zoning.

Illustrating contextual patterns

What are the most strategic things we need to regulate at the <u>lot</u> scale?

analysed

RESULT: Sub-patterns in each representative study area. Select 12 representative blocks to test qualitative and metric-specific patterns



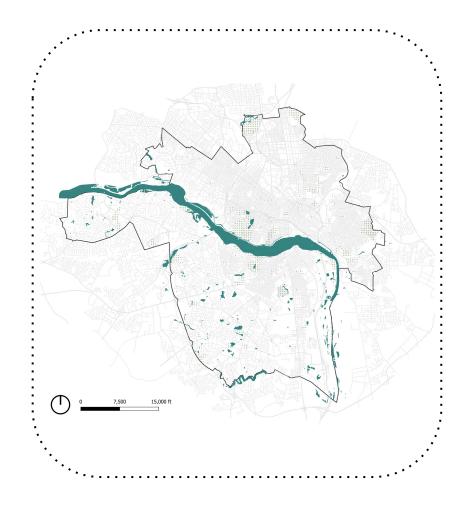
RESULT: Sub-patterns in each block

Illustrating misalignments between existing patterns and zoning.

Illustrating relationship between buildings and the public realm

What are the most strategic things we need to regulate at the building scale?

RESULT: Building taxonomy to test potential code changes.



City Scale Analysis

Mapping contextual patterns 1.

- Historic patterns a.
- Urban fabric patterns b.
- **Existing Land Use** C.
- Growth Potential d.

2. Mapping misalignments between existing patterns and zoning

- a. Lot size
- Building height b.
- Building height underutilized C.
- **Special Use Permits** d.

How to test for misalignments?

Comparing existing conditions with dimensions required by zoning:

LOT SIZE MIN

- Lot minimums for Single-Family and Two-Family
- Lot minimum range for zoning with multiple metrics

Parcels with multi-family buildings were excluded due to lack of comparable data. Lot minimums are defined by unit count in a case-by-case basis.

BUILDING HEIGHT MAX

- Comparison of current buildings height to the allowed height by zoning.
- Height was calculated by allowed stories

Where does the current zoning not reflect existing patterns of lot size, height, and use? Where has the city seen the most special permit requests to bridge those misalignments? Where can we zoom in to unpack these disconnects?

UNBUILT BUILDING HEIGHT

- Comparison of current buildings heights that are below the potential height allowed by zoning.
- Height was calculated by allowed stories

Name	SUP Count
The Fan	151
The Museum District	66
Church Hill	60
Church Hill North	52
Three Chopt	47
Jackson Ward	42
Monroe Ward	42
Carytown	37
Shockoe Bottom	33
Carver	32
Westhampton	31
Scott's Addition	29
Swansboro	29
Manchester	28
Northern Barton Heights	27
Ginter Park	26
Union Hill	21
VCU	21
Byrd Park	18
Oregon Hill	18

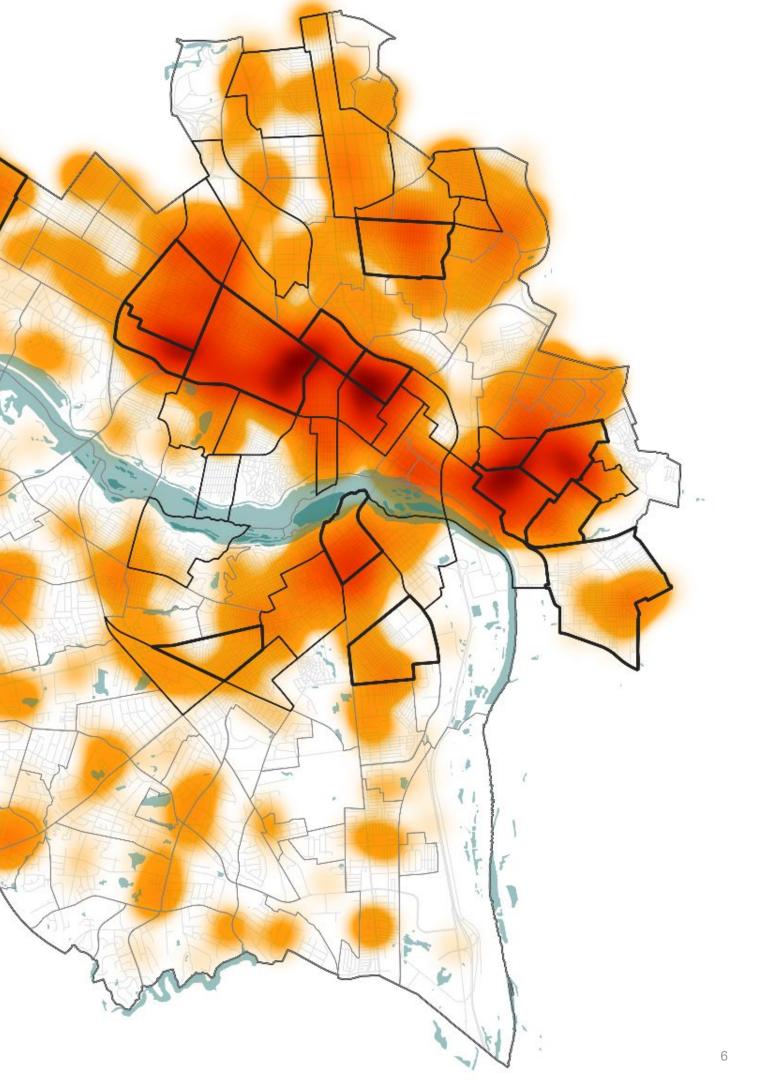
Special Use Permits Mapping nonconformities

Legend

Representative Neighborhoods Top 15 Top 37

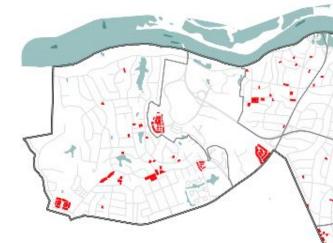
Concentration of SUPs

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Name	Lot Size Nonconformity Count		
The Fan	1121		
Fulton	471		
Oak Grove	450		
The Museum District	444		
Church Hill	379		
Three Chopt	337		
Randolph	327		
Oakwood	312		
Providence Park	301		
Highland Terrace	293		
Church Hill North	290		
Bellevue	274		
Carytown	256		
Maymont	246		
Northern Barton Heights	243		
Chimborazo	219		
Swansboro West	196		
Forest Hill	190		
Broad Rock	188		
Jackson Ward	185		
Carver	185		

Lot Size Nonconformities Mapping nonconformities



Legend

Priority Neighborhoods

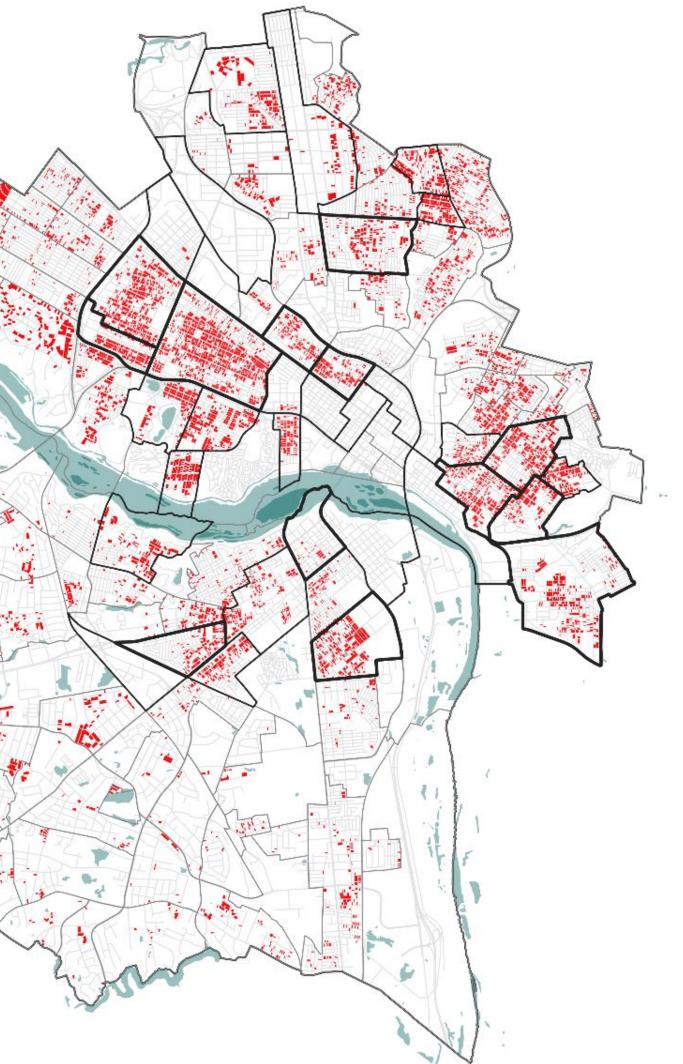


🔲 Тор 37

Lot size nonconformities

for single family and duplex parcels

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Name	Building Height Nonconformity Count
The Fan	21
Biotech and MCV District	17
VCU	12
Shockoe Bottom	11
City Center	8
Jackson Ward	6
Capitol District	6
Union Hill	5
Stony Point	4
Gilpin	4
Shockoe Slip	4
Old Town Manchester	4
Hioaks	4
Church Hill	3
Manchester	3
Scott's Addition	3
Upper Shockoe Valley	3
Carytown	2
Carver	2
Westhampton	2
Northern Barton Heights	2

Building Height Nonconformities

Mapping nonconformities

Legend

Priority Neighborhoods

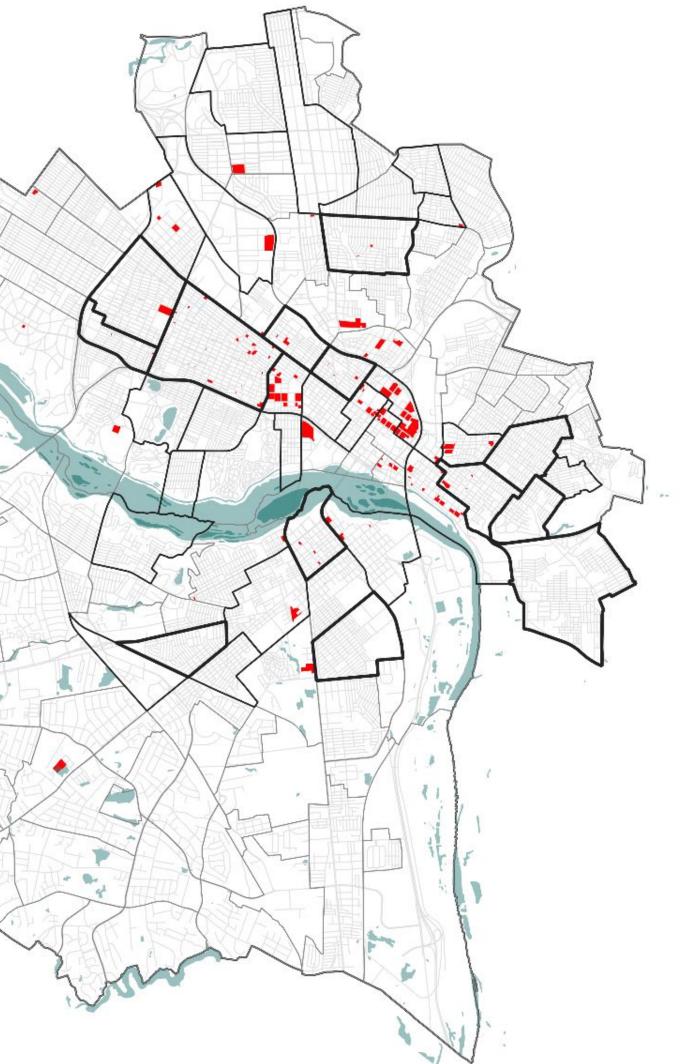
Top 15

Top 37

Building height nonconformities

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Unbuilt Building Height

Mapping parcels under zoning height maximums

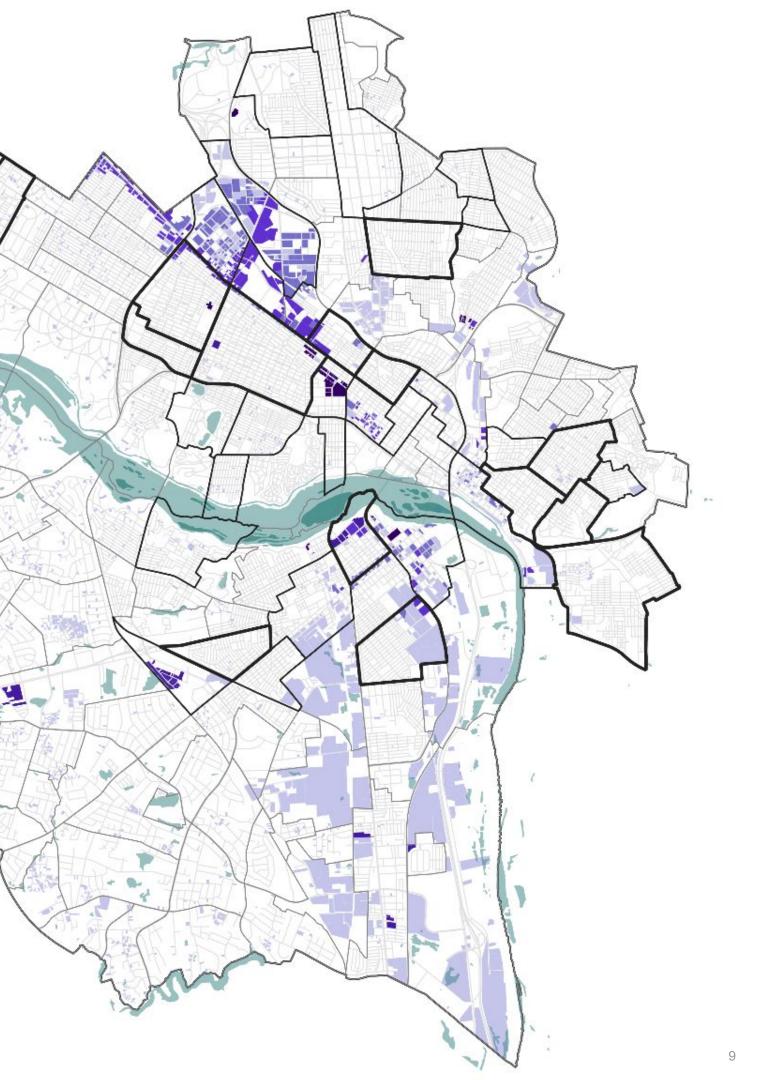
Name	Greatest Unbuilt Building Height (stories)	Coverage of parcels with a story capacity of 3 or more	
Broad Rock Industrial Park	3	55%	
Maury	3	54%	
The Diamond	7	47%	
Scott's Addition	7	45%	
Newtowne West	7	41%	
Museums	7	30%	
Old Town Manchester	12	22%	
Hioaks	14	19%	
VCU	14	19%	
Manchester	12	16%	
Belt Center	12	14%	
Midlothian	11	4%	



Priority Neighborhoods Top 15 Top 37 Unbuilt building height for existing parcels under existing zoning 12 - 14 stories 9 - 12 stories 6 - 9 stories 4 - 6 stories

3 - 4 stories

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Representative Neighborhoods

Top 10 Neighborhoods Neighborhood Name Neighborhood ID CARY Carytown CH Church Hill FAN The Fan FLTN Fulton **JKWD** Jackson Ward **MNCH** Manchester MUSD The Museum District NBHG Northern Barton Heights Oak Grove **OKGR** TCHP Three Chopt

Legend

Priority Neighborhoods

 Top 10 Neighborhoods
Other Representative Neighborhoods

Other Representative Neighborhoods Neighborhood Name Neighborhood ID **Belt Center BCTR** BIO **Biotech and MCV** District **BLVU** Bellevue Broad Rock BRDR **BYDP** Byrd Park CC **City Center** CHBZ Chimborazo CHN Church Hill North **CRVR** Carver DIAM The Diamond Forest Hill FRHL GNP **Ginter Park** HGTR **Highland Terrace** MAY Maymont Monroe Ward **MNWD**

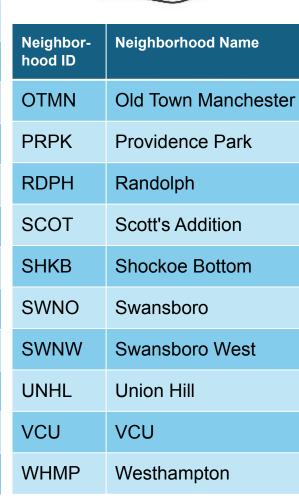
Oakwood

Oregon Hill

OKW

ORGH

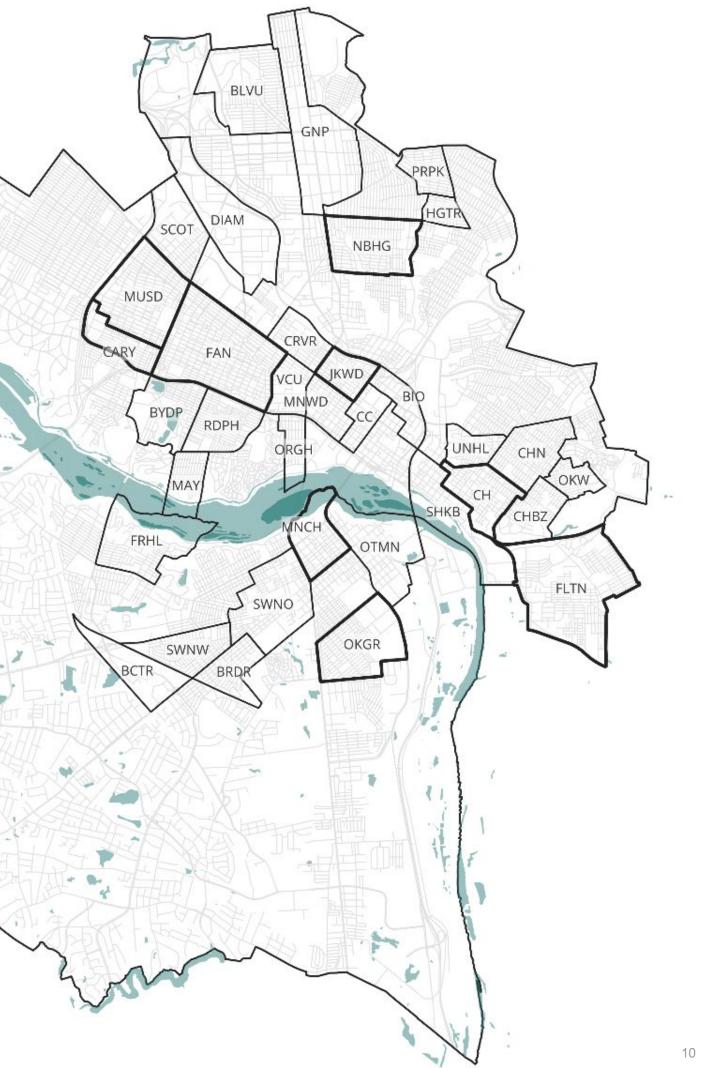
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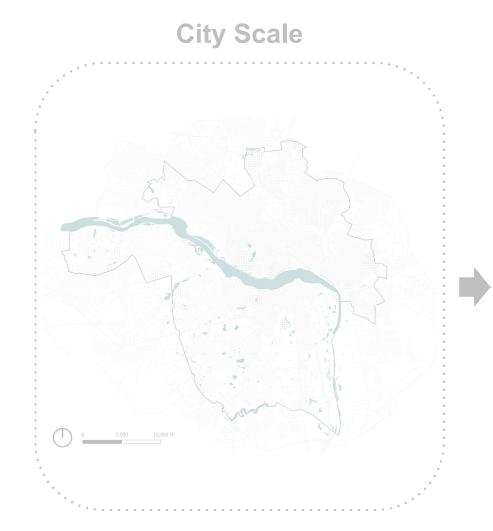
ТСНР

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Multi-scalar analysis

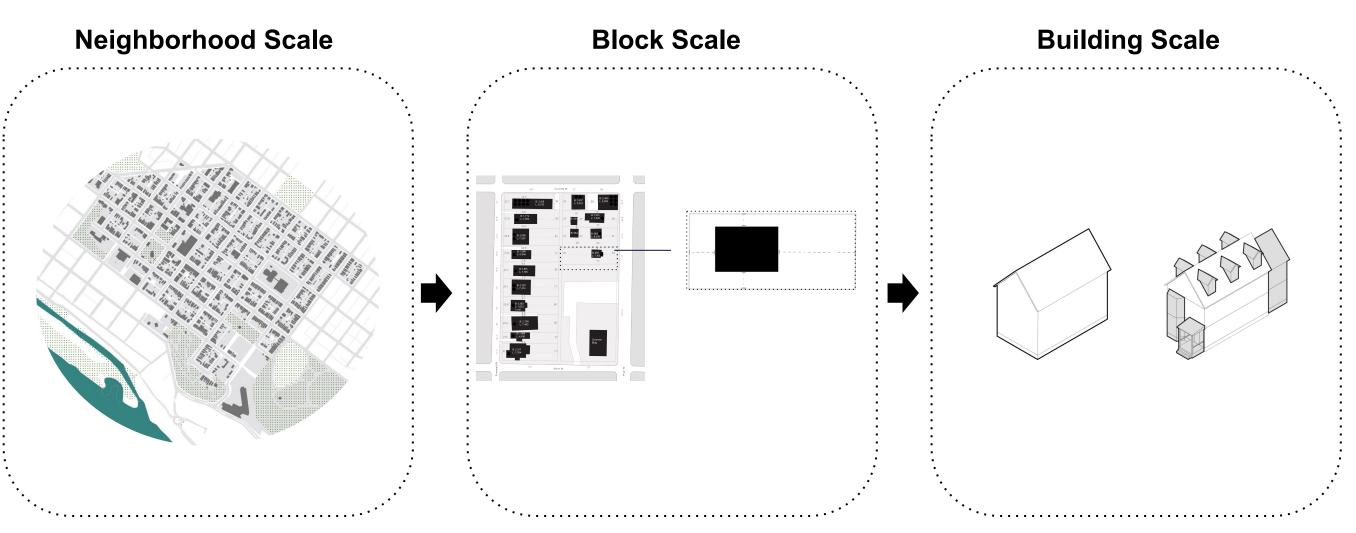


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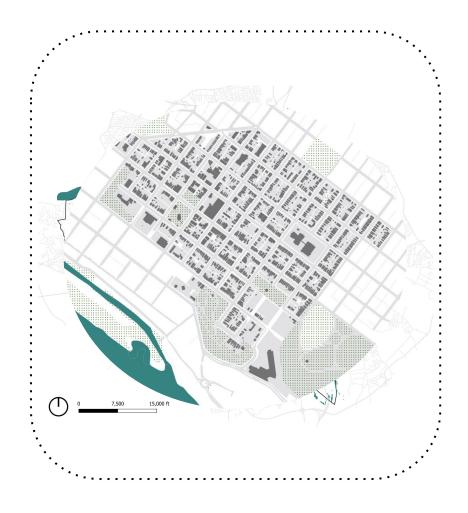
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Illustrating relationship between buildings and the public realm

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RESULT: Building taxonomy to test potential code changes.



Neighborhood Scale Analysis

1. Form misalignments

- a. Lot size
- b. Building height
- c. Lot width
- d. Lot coverage
- e. SUPs

2. Use misalignments

- a. Land Use
- b. SUPs

NONCONFORMITIES*

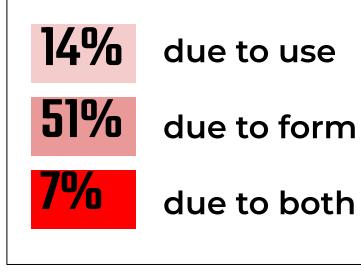
6. WESTVIEW - WEST END

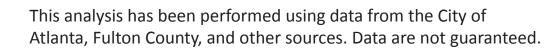
*in R-1 - R-5 Districts

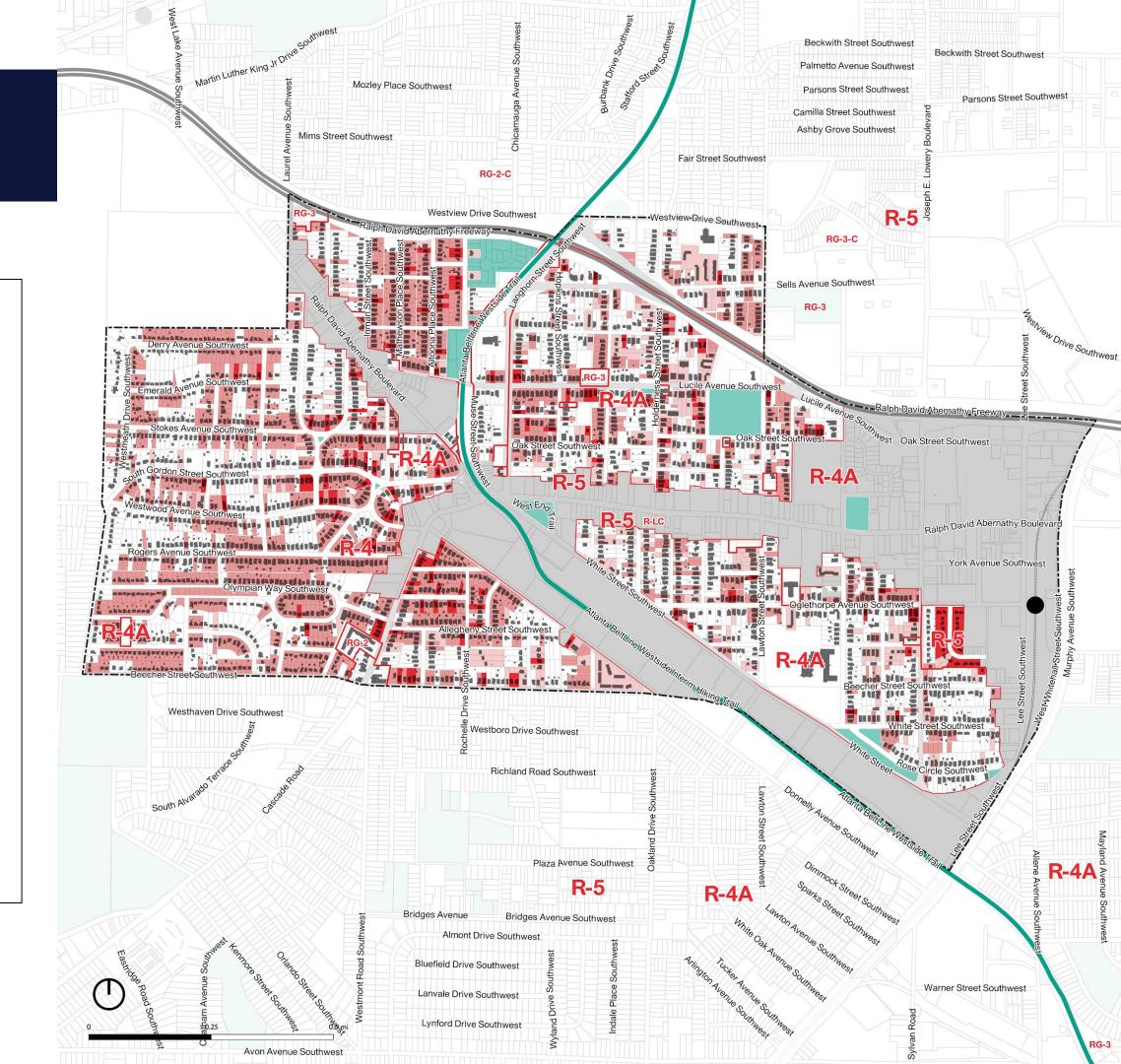
Predominantly zoned R-4 and R-4A.

59%

of R-1 to R-5 parcels in this study area are nonconforming based on lot size, building coverage, FAR and/or use.







CHARACTER

WESTVIEW - WEST END - BLOCK 1

URBAN CONSERVATION AREA, ADJOINING CORRIDOR GROWTH AREA



657 Lawton St SW - Porch + Balcony



697 Lawton St SW - Stair + Porch



1111 Oglethorpe Ave SW - Stair + Porch



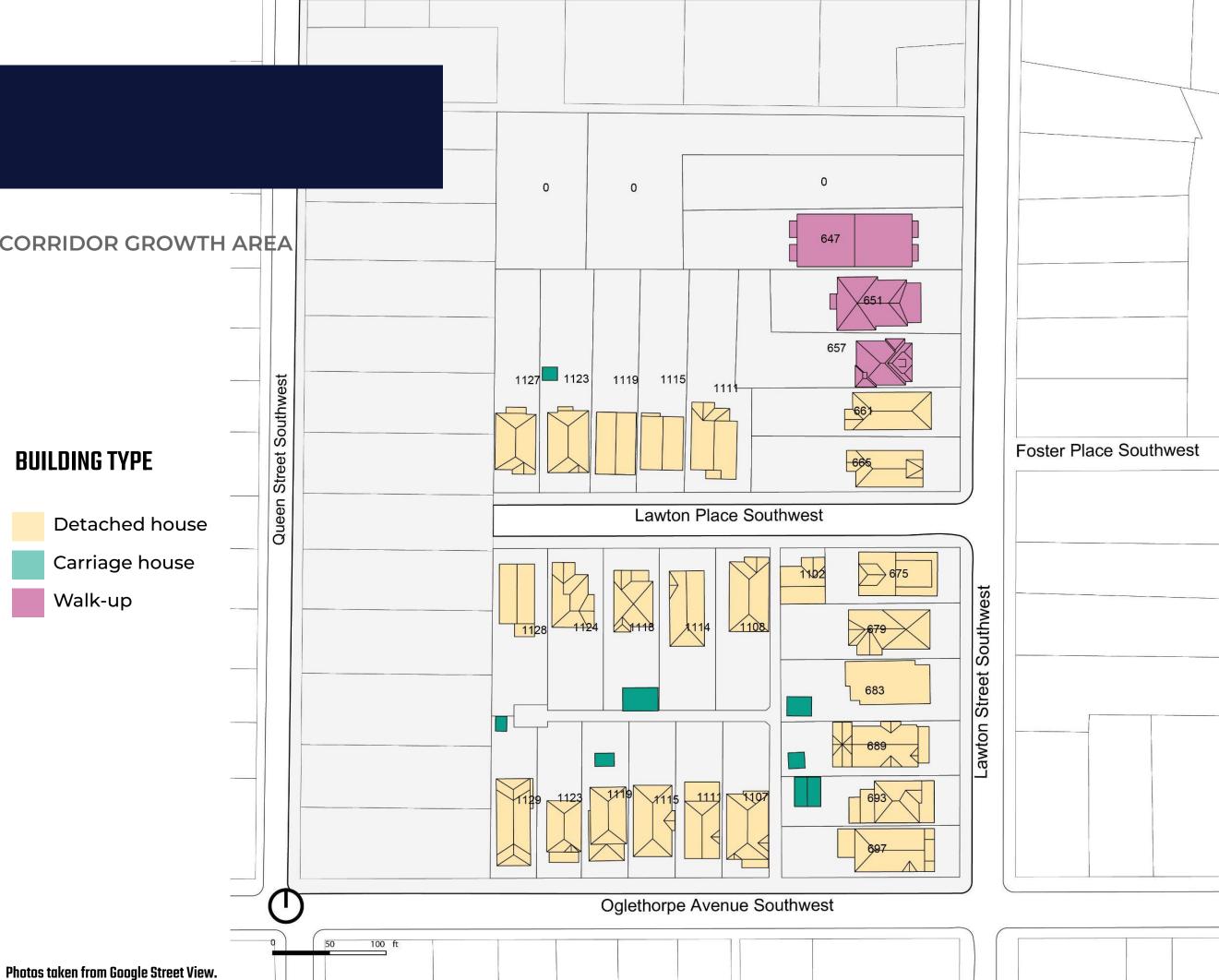
1115 Lawton Pl SW - Stair + Porch



1119 Oglethorpe Ave SW - Stair + Porch

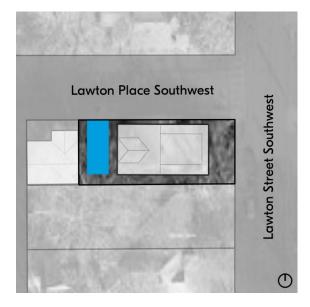


1118 Lawton PI SW - Porch



DETACHED HOUSE

dh 12



Density in relation to zoning?

WEST END 675 Lawton St SW

Corner modified bungalow with large front porch

Era Built: Before 1929 Zoning: R-4A ACD Area: Urban Conservation / Growth -Corridor

Conformity	Units: <mark>2</mark>	Setbacks			
		Front: 23.5'	L Side: 7'	R Side HD: <mark>3</mark> '	Rear: <mark>29</mark> '
	FAR: <mark>0.69</mark>	Lot Frontage Width: 50'		Lot Size: <mark>6,043 sf</mark>	
Building Massing	# Stories along Street: 1.5		W = 46′	D = 72'	

How does the building engage the street?

Frontage	porch	stoop	balcony	stair	landscape
Door Prominence	front primary	front secondary	side	internal	not visible
Porch Dimensions	full	half	none		
Fenestration	low	med	high		
Parking	pad	garage	none		

