



National Trust *for*
Historic Preservation



Untapped Potential:

Why Old Buildings Matter for 21st Century Cities

Carson Hartmann, Research Analyst
Preservation Green Lab



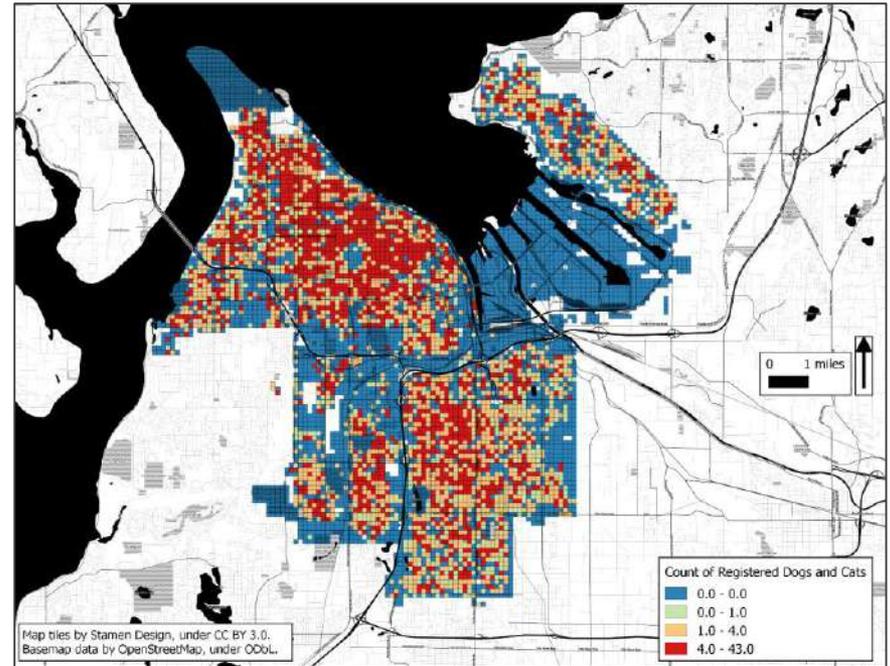
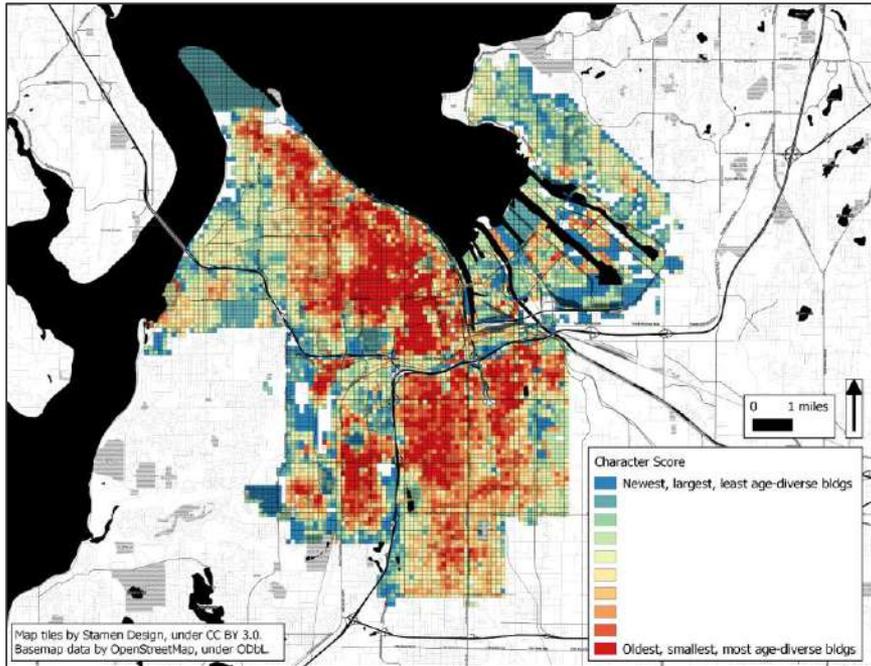
NEVADA PRESERVATION FOUNDATION
FEBRUARY 8th, 2018

Agree / Disagree

- A) Reusing old buildings keeps my city's history alive and visible.
- B) Reusing old buildings is a smart way to address climate change.
- C) Reusing old buildings fosters walkable neighborhoods where people like to spend their free time.
- D) Reusing old buildings helps my city become a dense city where people from a variety of backgrounds can afford to live and work.
- E) Reusing old buildings is a smart way to provide homes for puppies and kittens.



Reusing Old Buildings Supports Puppies and Kittens

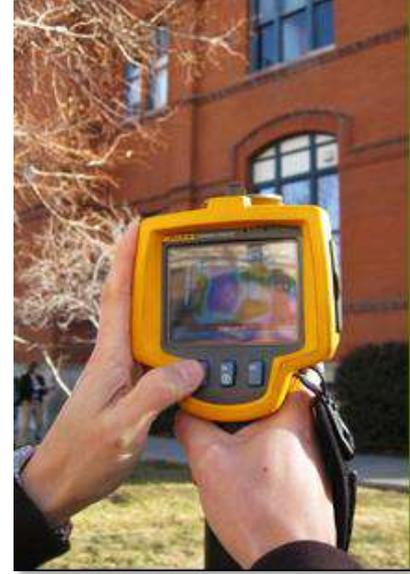


There is a clear, significant statistical link between the presence of older, smaller buildings and the number of registered cats and dogs.



National Trust *for* Historic Preservation

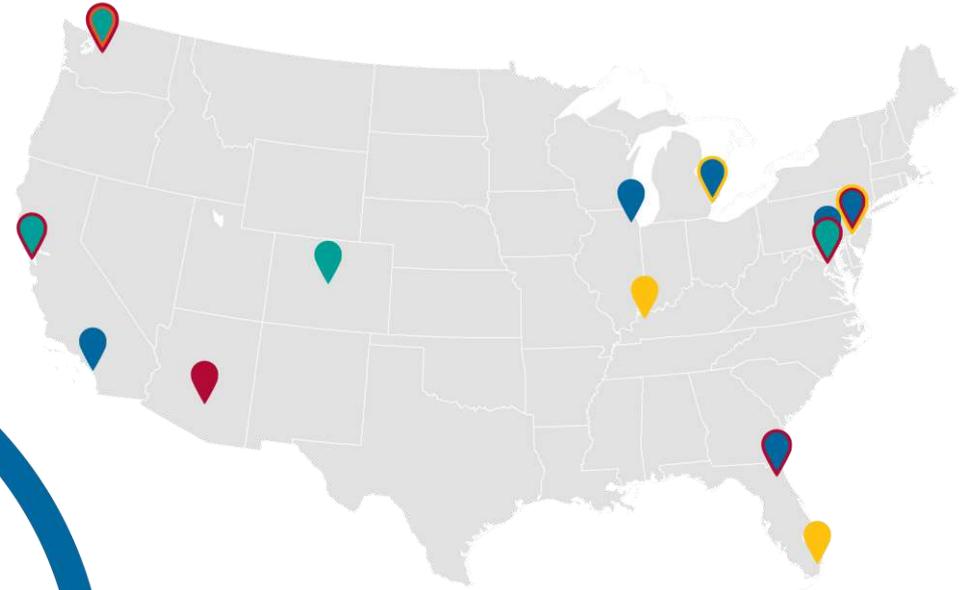
Preservation Green Lab



PRESERVATION GREEN LAB

promotes the conservation, reuse, and retrofitting of existing buildings as a powerful strategy for supporting community health, equity, and resilience.

PGL WORK



Exploration and Research

- GIS and statistical analyses
- Data visualizations
- Research briefs
- Blog Posts

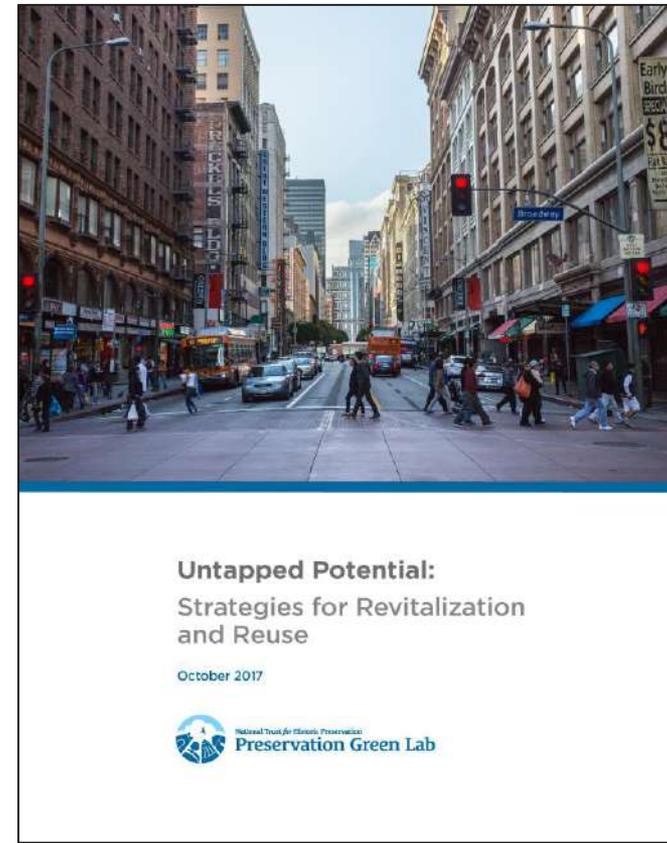
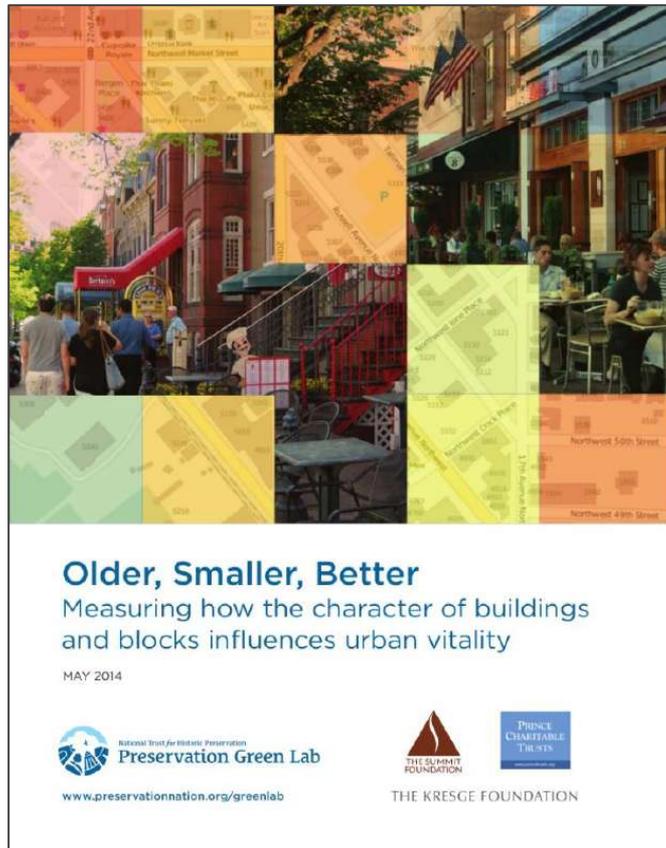
Implementable Policy

- National Treasures
- Partnership for Building Reuse
- ReUrbanism

Defensible Positions

- Reports
- Peer Reviewed Research
- Op-Eds

Demonstrating Value + Advocating for Reuse



Broaden the scope of preservation by showing what a big difference older, smaller buildings and building reuse make

Democratizing Research and Data



Older, Smaller, Better

Measuring how the character of buildings and blocks influences urban vitality

MAY 2014



www.preservationnation.org/greenlab



Untapped Potential: Strategies for Revitalization and Reuse

October 2017



Why?

+

How?

Broader research and preservation by a big difference older buildings and reuse make



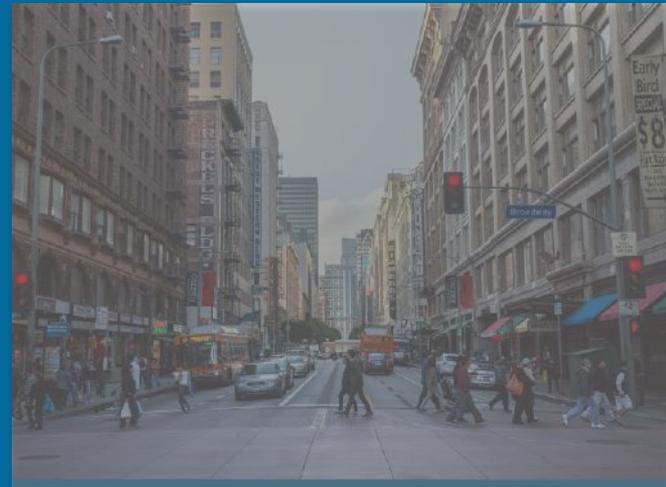
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Untapped Potential: Strategies for Revitalization and Reuse

October 2017



Why?

+

How?



“The greenest building is
one that already exists”

-Carl Elefante

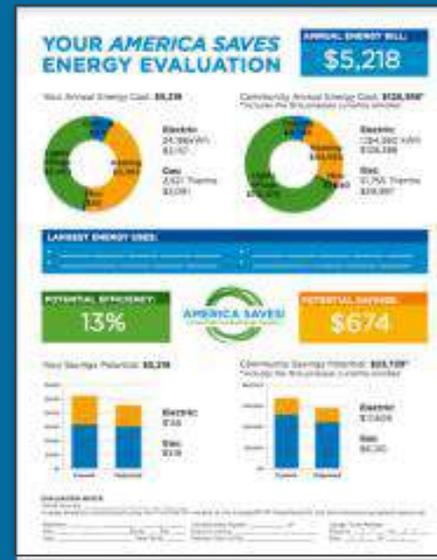


The Greenest Building:
Quantifying the Environmental
Value of Building Reuse

A REPORT BY
**Preservation
Green Lab**
NATIONAL TRUST FOR
HISTORIC PRESERVATION

WITH SUPPORT FROM
**THE TRUSTEE
FOUNDATION**

IN PARTNERSHIP WITH:
CASCADIA
SKANSKA
Quantis



Realizing the Energy Efficiency Potential of Small Buildings

June 2013

A REPORT BY:



IN PARTNERSHIP WITH:



Quantify, Scope, Scale

“What are a city’s buildings like? What are we working with?”

“Cities need old buildings”

-Jane Jacobs



Older, Smaller, Better

Measuring how the character of buildings and blocks influences urban vitality

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Preservation Green Lab
www.preservationinformation.org/greenlab/

 **THE KRESGE FOUNDATION**
 **Peter's Charitable Trusts**



Jane Jacobs, 1961:

“Cities need old buildings so badly it is probably impossible for vigorous streets and districts to grow without them.”



Ed Glaeser, 2011:

“Restricting construction ties cities to their past and limits the possibilities for their future.”

Older, Smaller, Better Project Overview

- **OBJECTIVE:** Test Jane Jacobs' hypothesis that diverse city fabric supports greater vitality and opportunity
- Used newly available data to assess the social, cultural, and economic value of older, smaller buildings
- Focused on Seattle, San Francisco, and Washington D.C.



Older, Smaller, Better
Measuring how the character of buildings and blocks influences urban vitality

MAY 2014

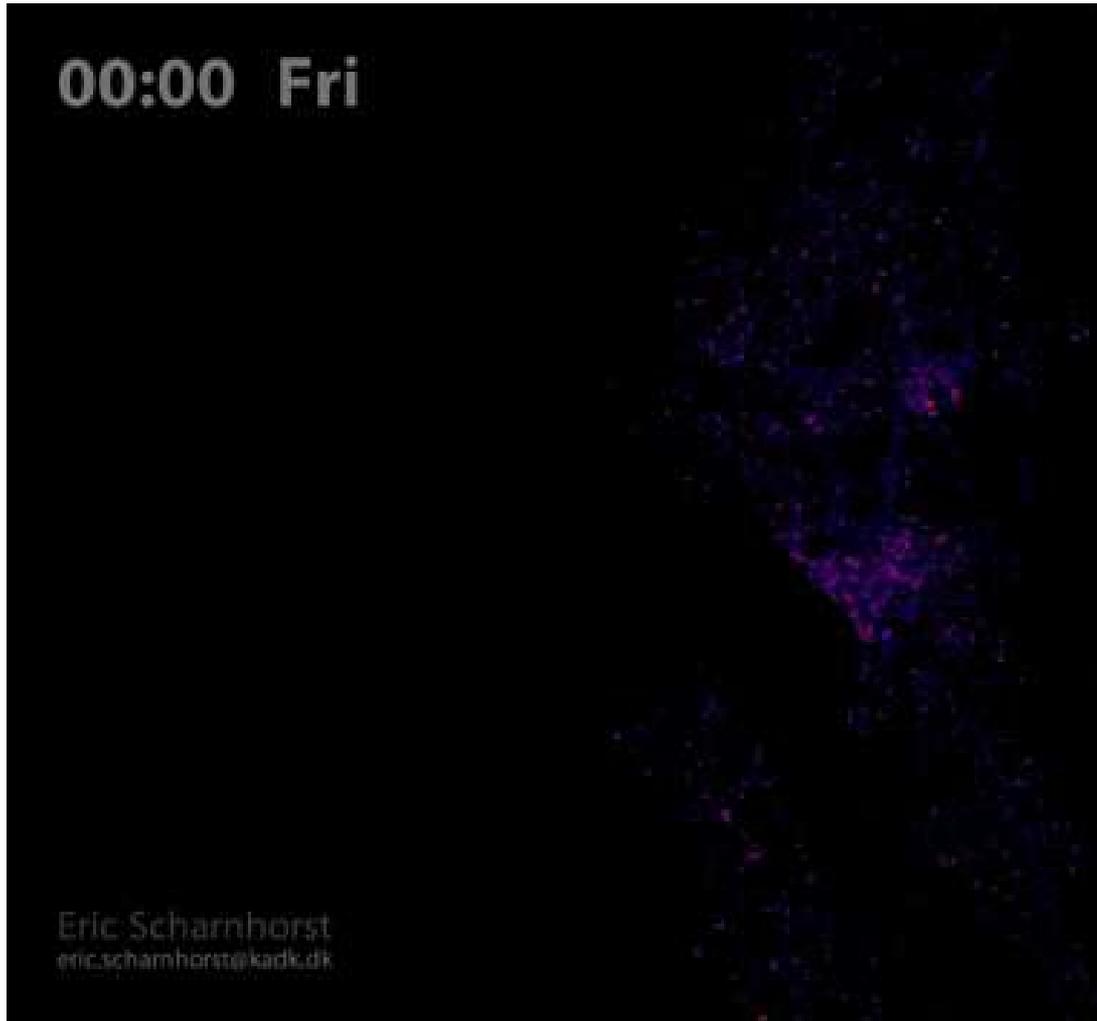
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 THE SUMMIT FOUNDATION

 PRINCE CHARITABLE TRUSTS

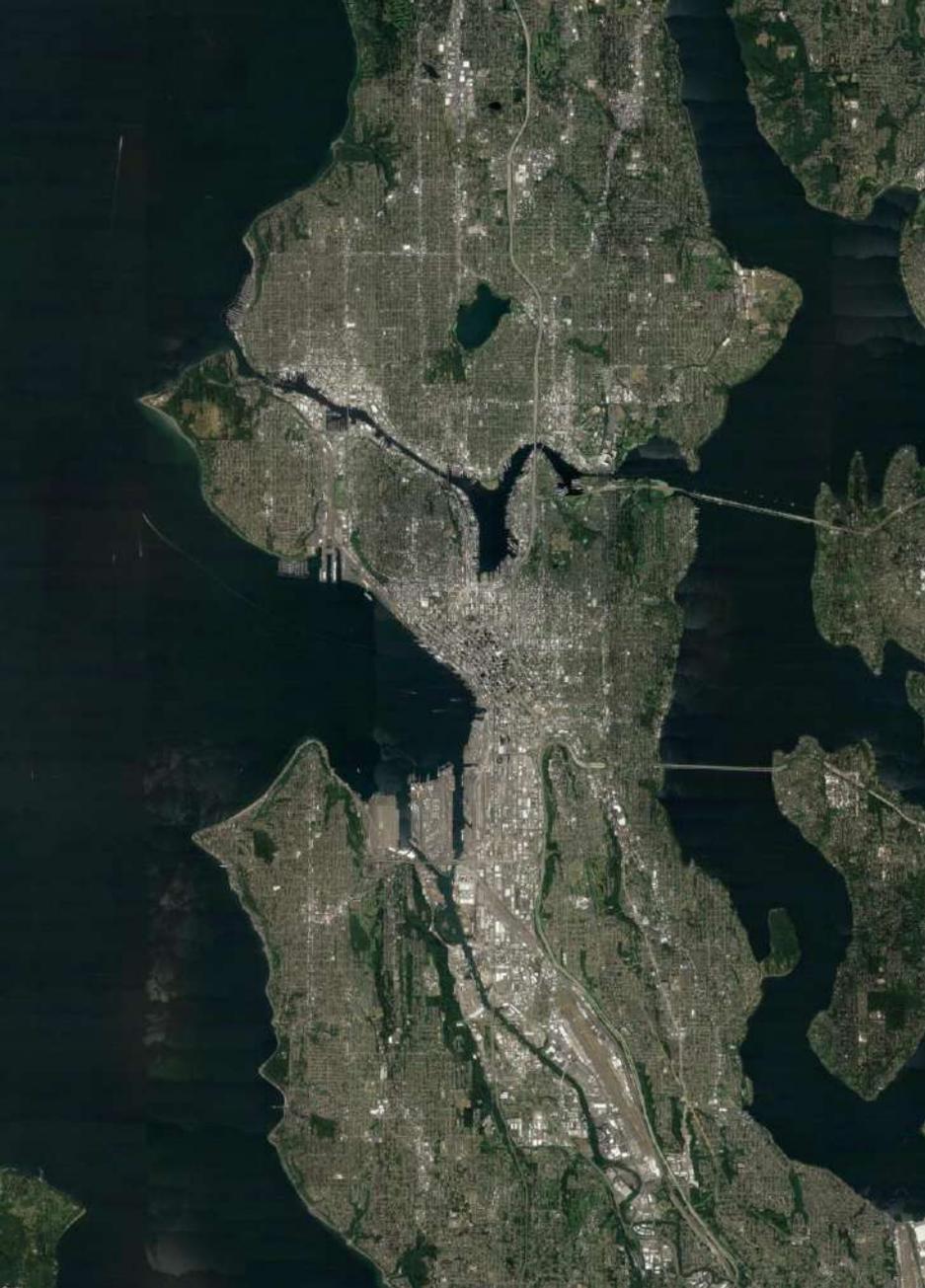
THE KRESGE FOUNDATION

Measures of Livability



- Used innovative data sources to link older buildings to unique performance
- EXAMPLE: Cell phone activity concentrated in the oldest areas of Seattle on weekend nights

OSB Mapping Methodology

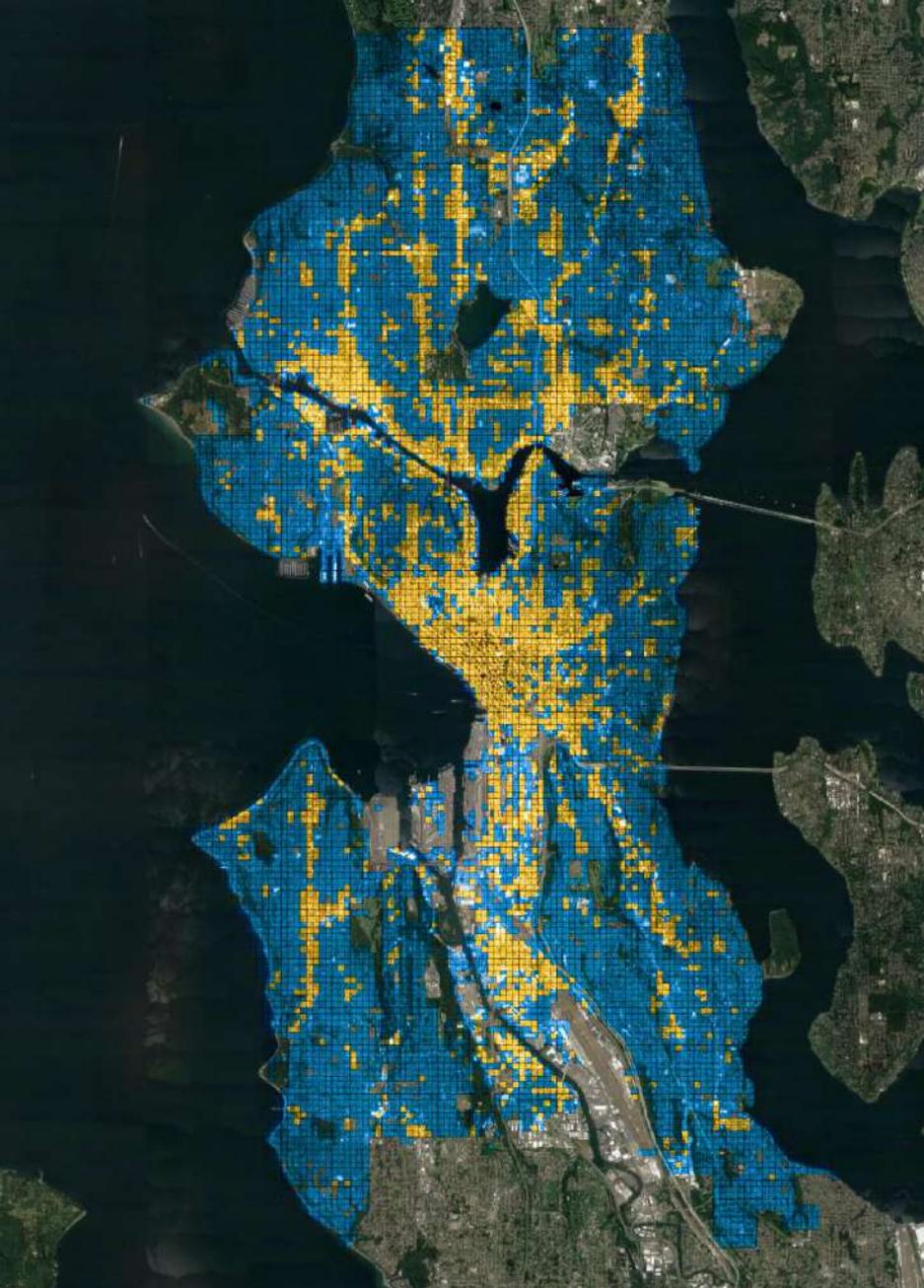


OSB Mapping Methodology

- Overlaid 200-meter-by-200-meter grid

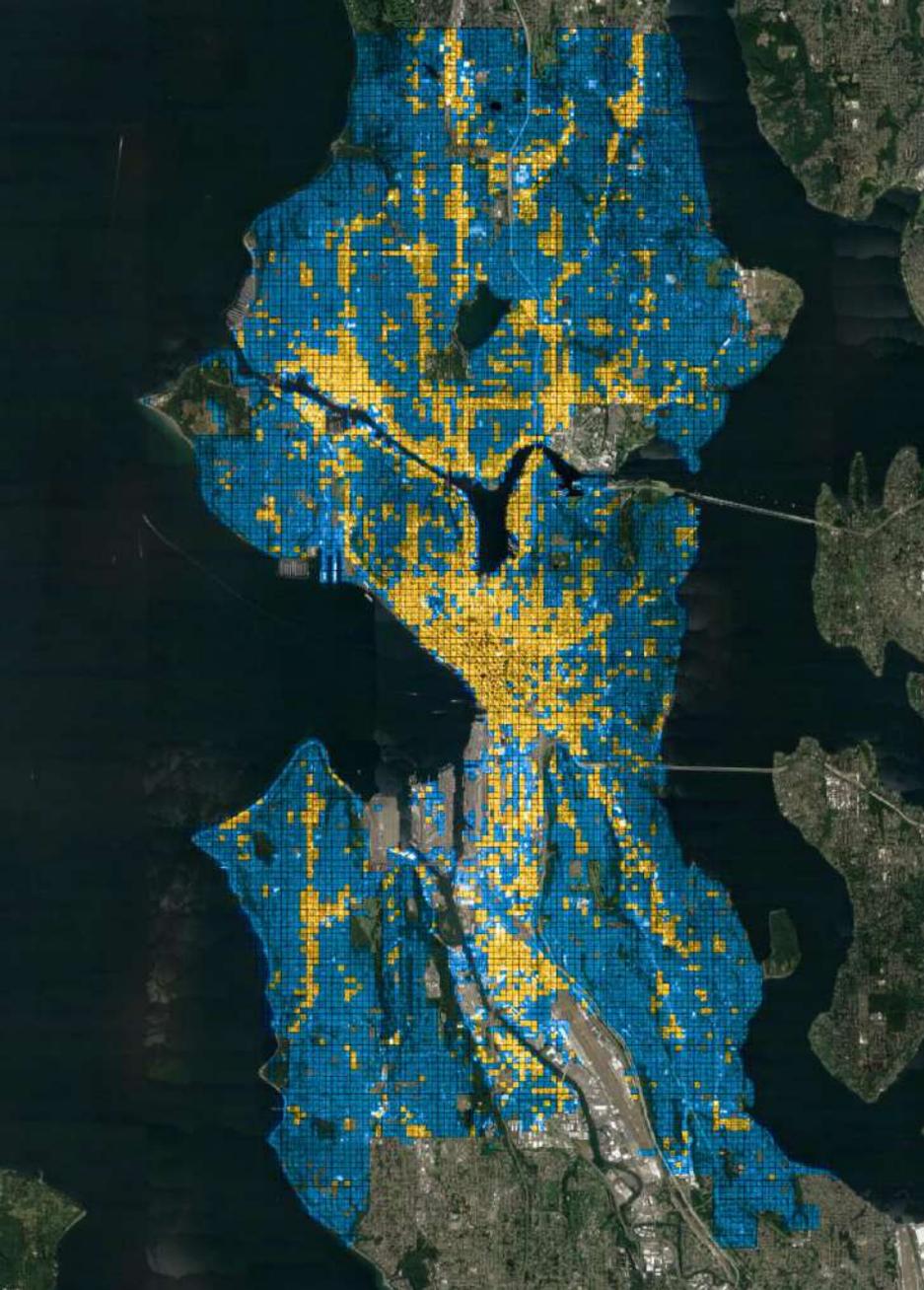


Our Mapping Methodology



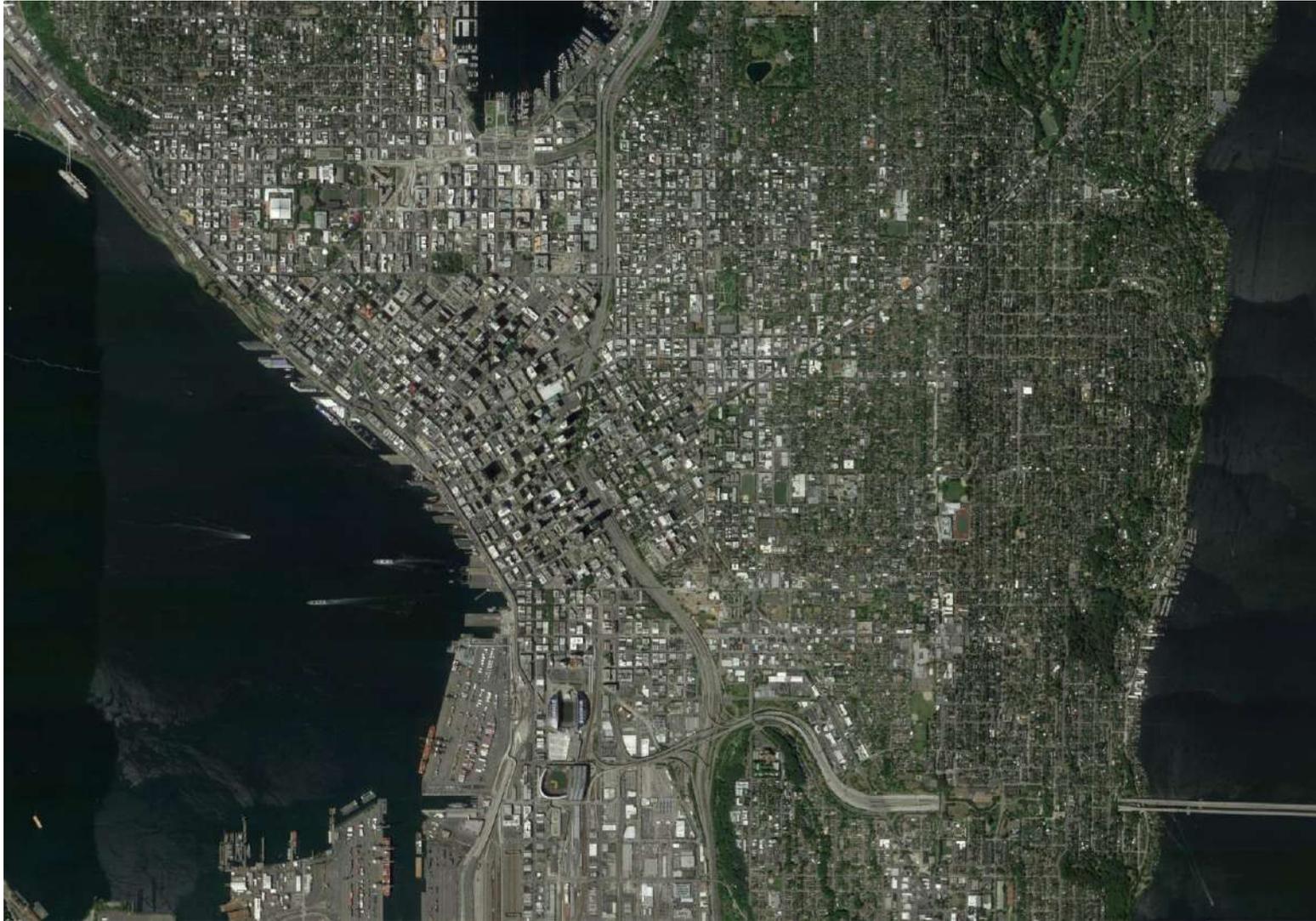
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- *Older, Smaller, Better* focused on commercial and mixed-use areas

Our Mapping Methodology

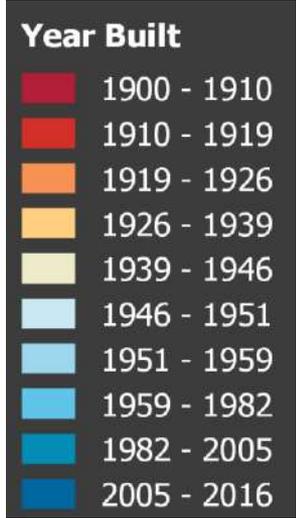


- Overlaid 200-meter-by-200-meter grid
- *Older, Smaller, Better* focused on commercial and mixed-use areas
- Measured key features of the built fabric:
 - Median building age
 - Diversity of building age
 - Granularity

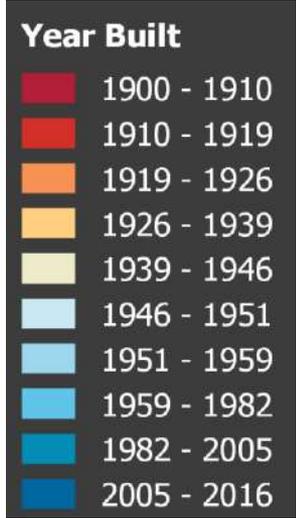
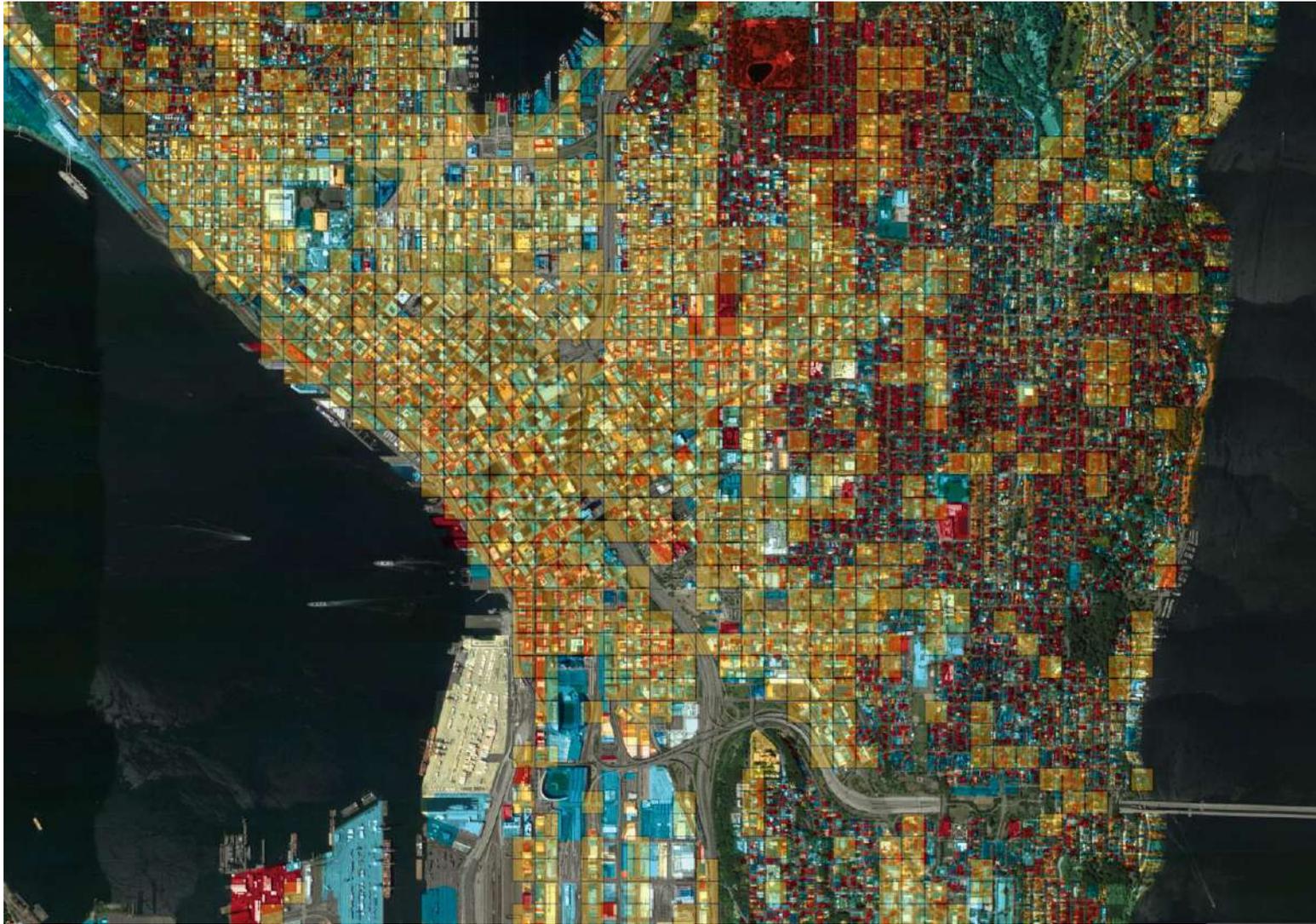
Seattle Parcel Data



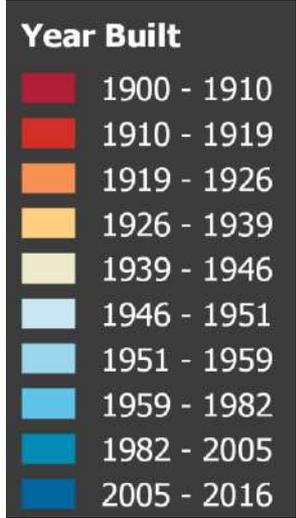
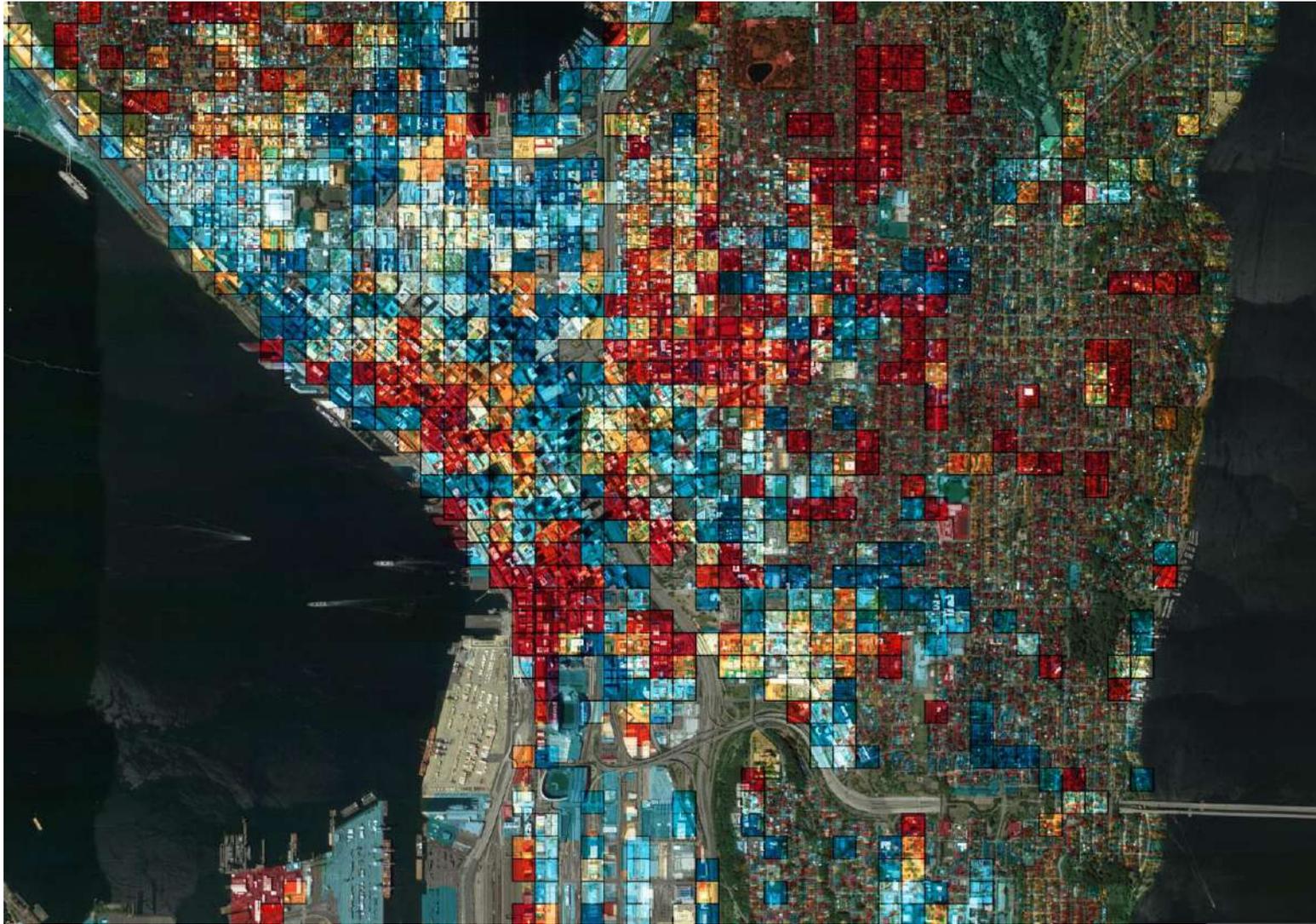
Seattle Parcel Data : 'Year Built'



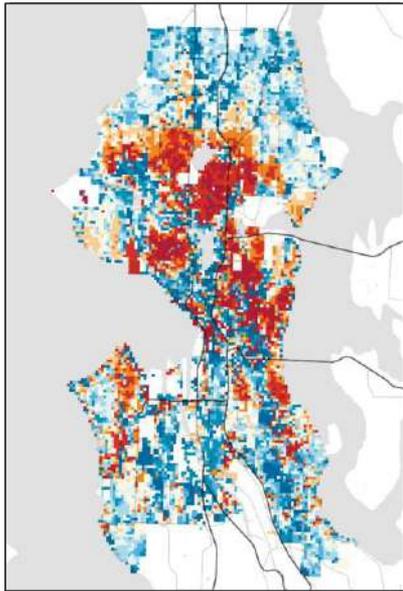
Seattle Parcel Data : 'Overlay Grid



Seattle Parcel Data : 'Year Built' in Grid

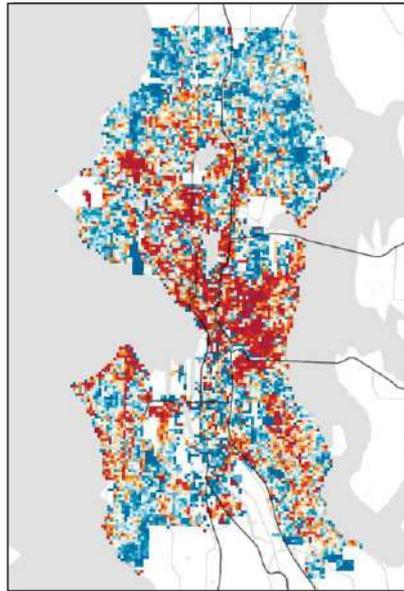


Measures of City Fabric



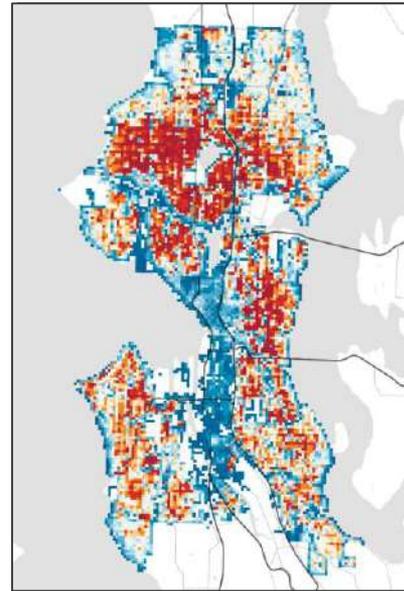
Building Age

+



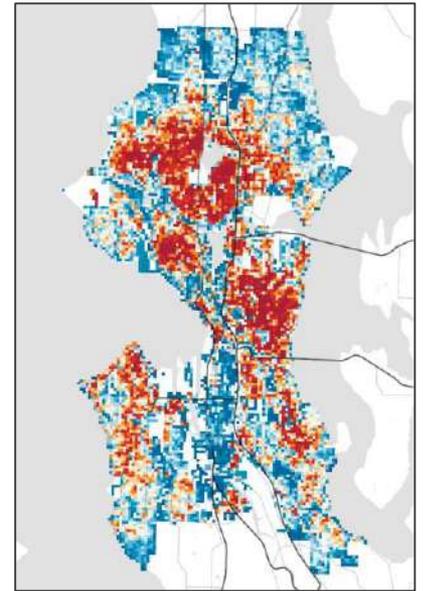
Age Diversity

+



Granularity

=



Composite of all three

Our composite measure = “Character Score”

Low Character Score

- Newer buildings
- Larger buildings
- Less age diversity

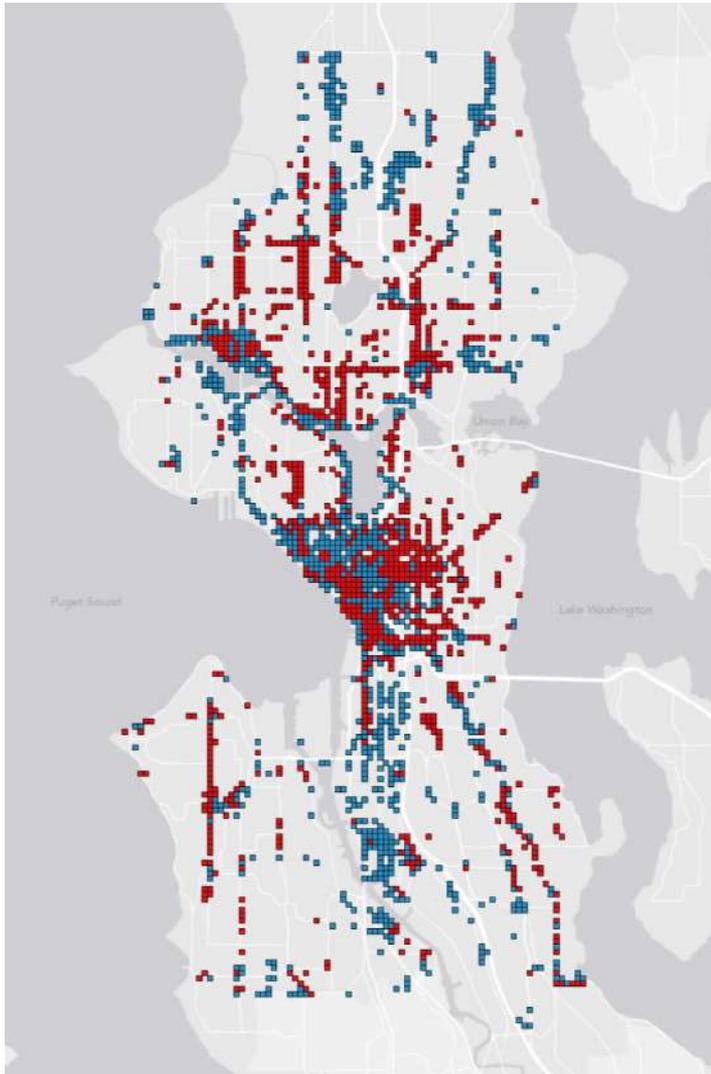


High Character Score

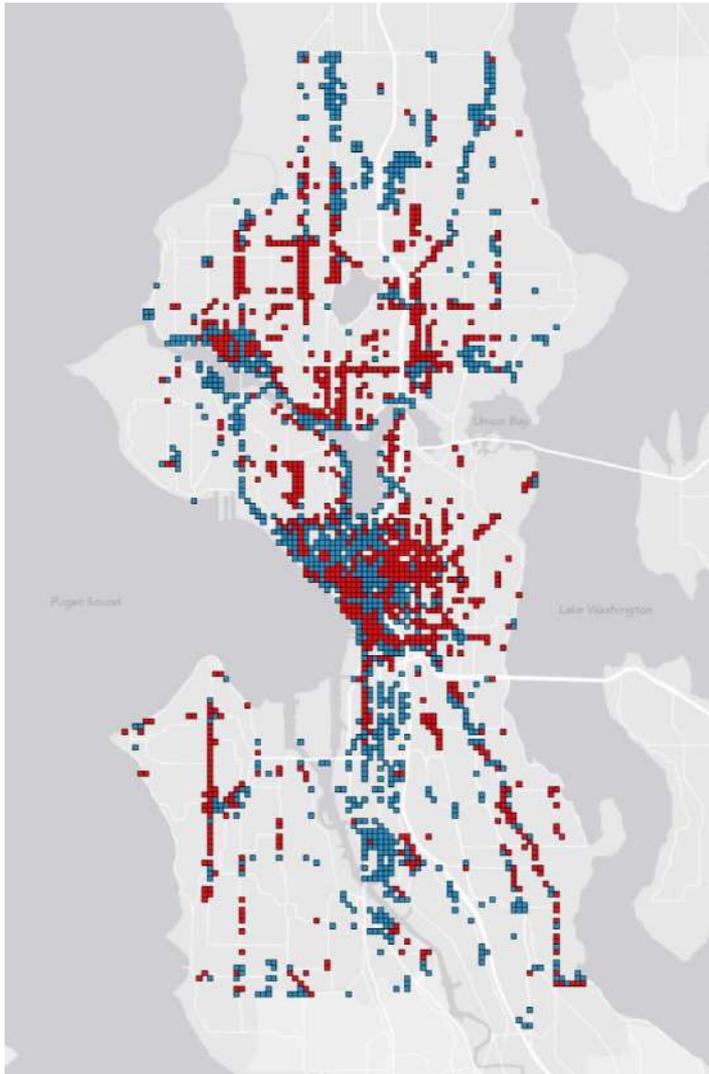
- Older buildings
- Smaller buildings
- Greater age diversity



Seattle – Character Score



Seattle – Character Score



Older, smaller, more
age-diverse buildings

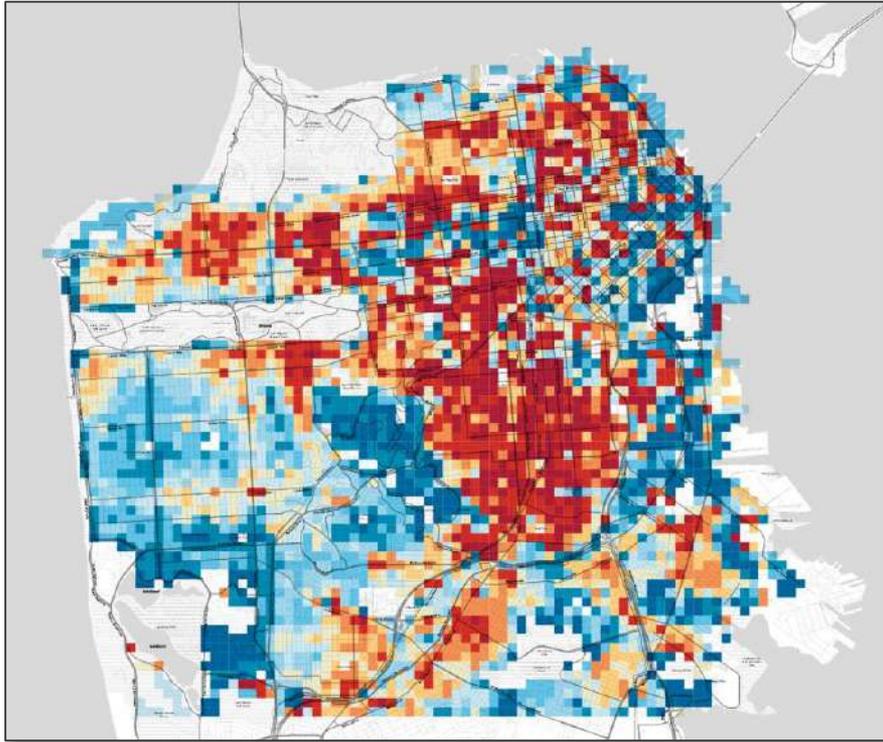
Average Walk Score = 83.6



Newer, larger, less
age-diverse buildings

Average Walk Score = 78.1

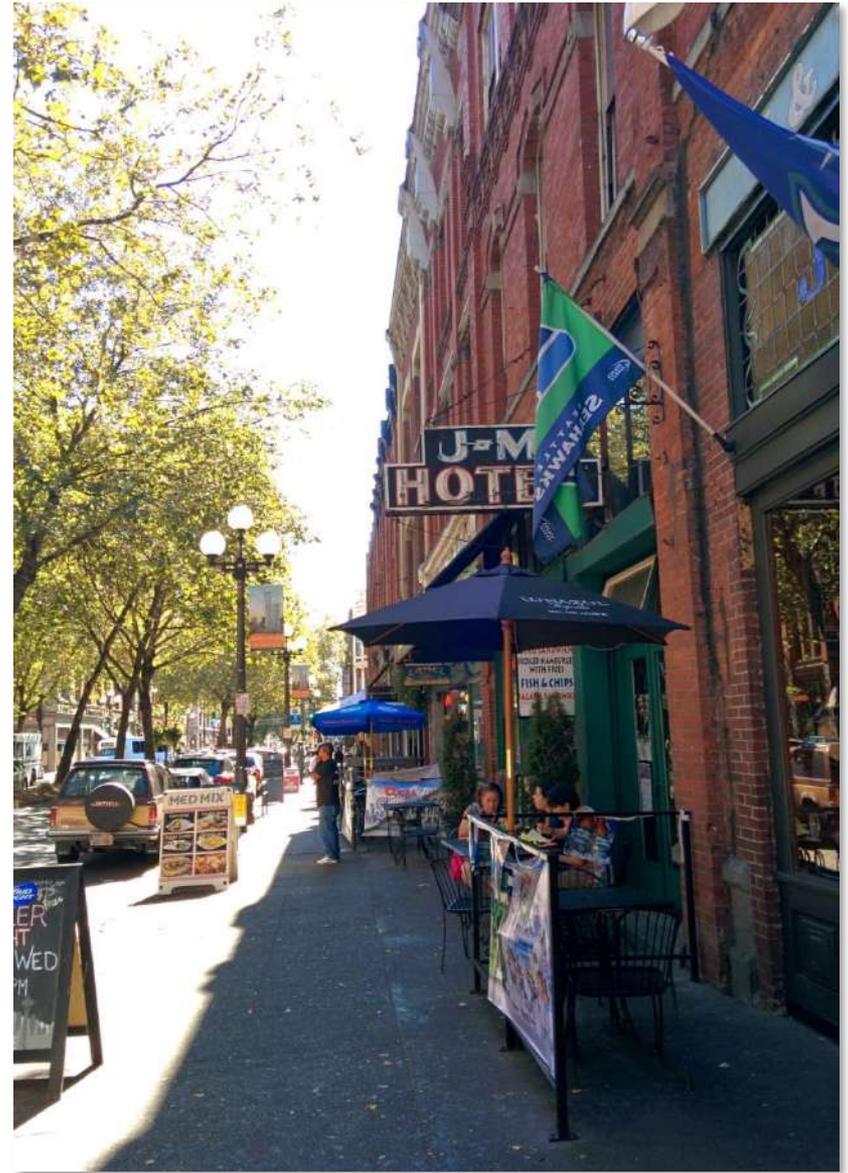
Statistical Analysis



- Developed spatial regression models to determine relative role of building fabric alongside other measures
 - **Private investment** (Construction permit dollars)
 - **Access to transit** (Transit Score)
 - **Income** (Median income)

Older, Smaller, Better Findings

- Where you find older, smaller buildings and mixed-vintage blocks, you see significantly...
 - Greater walkability
 - Younger residents and a greater mix of people at different stages of life
 - Greater nightlife and cultural vitality
 - More jobs, creative jobs, and businesses per square foot
 - More women and minority-owned businesses, non-chain businesses, small businesses, and new businesses





SEATTLE, WA



BUSINESSES WITH WOMEN OR MINORITY OWNERSHIP

2x
WOMEN AND
MINORITY
OWNERSHIP

Areas of Seattle with older, smaller, more age-diverse buildings have more than twice the rate found in areas with mostly newer, larger buildings.



Oldest, most diverse & finest-grained buildings



19.2%



Newest, largest, least age-diverse buildings



9.5%



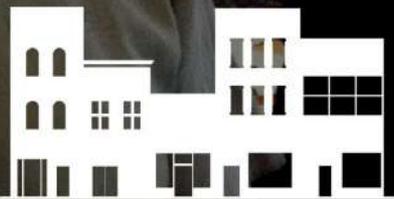
SEATTLE, WA



JOBS PER 1,000 SQ FT

36.8%
MORE
JOBS/SQ FT

There are more jobs per commercial square foot in areas of Seattle composed of older, smaller, more age-diverse buildings than in areas with mostly newer, larger buildings.



Oldest, most diverse & finest-grained buildings



4.39 jobs



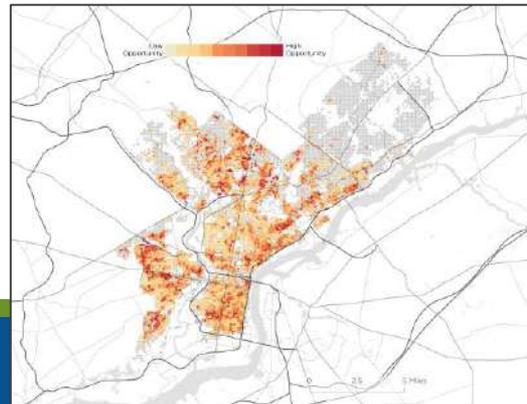
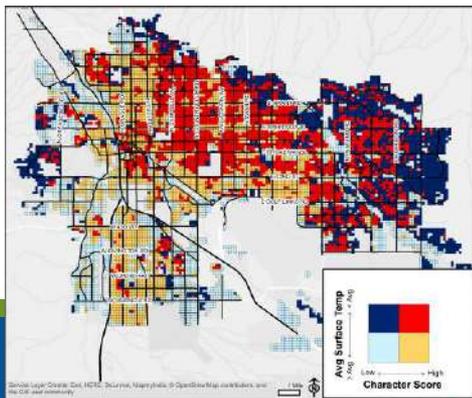
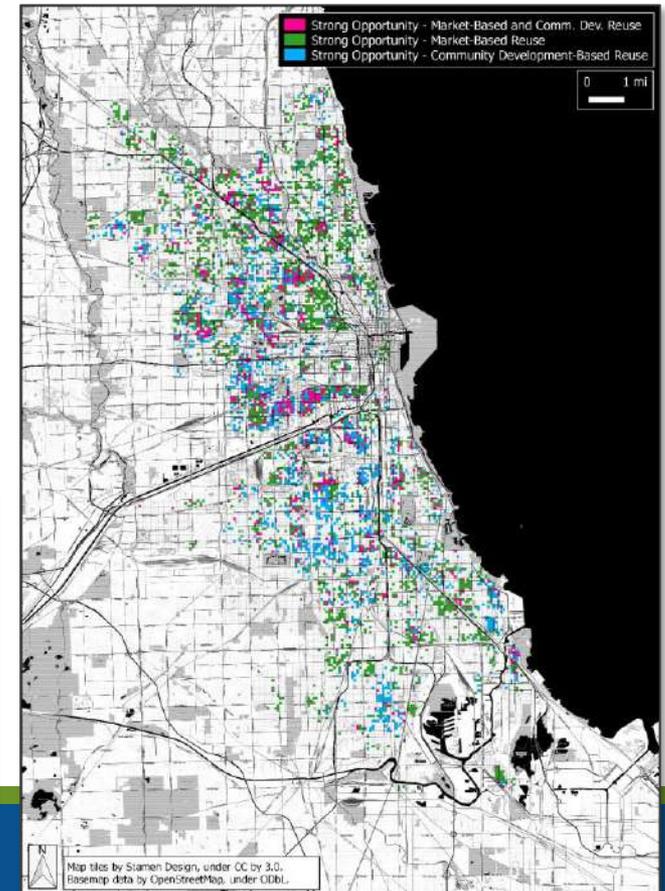
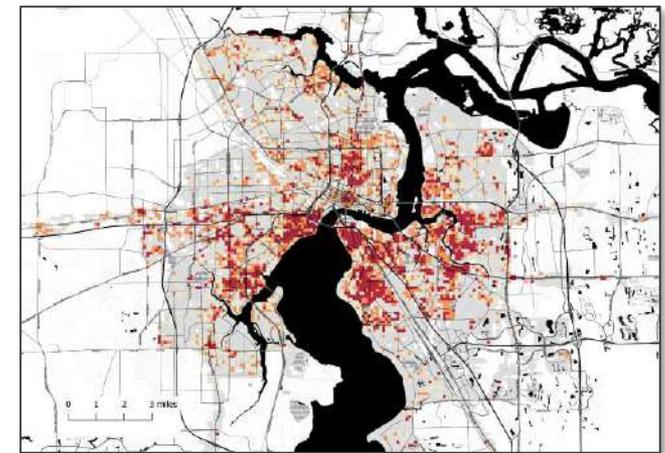
Newest, largest, least age-diverse buildings



3.21 jobs

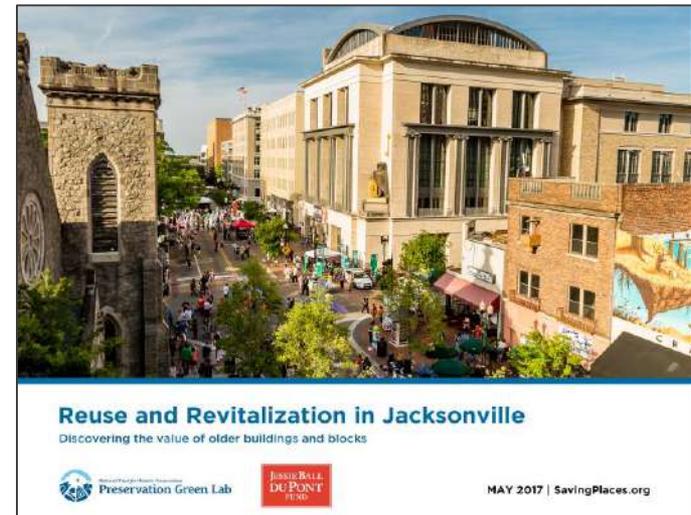
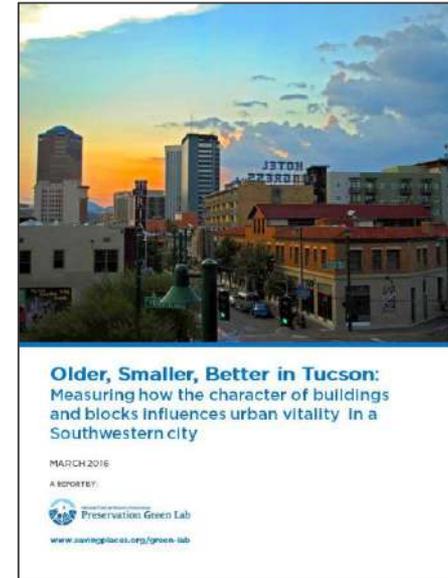
Older, Smaller, Better Evolution

- Since publication of the original report in 2014...
 - Peer-reviewed publication in the *Journal of the American Planning Association*
 - Integration of mapping methodology into PGL's Partnership for Building Reuse



Older, Smaller, Better Evolution

- Since publication of the original report in 2014...
 - Peer-reviewed publication in the *Journal of the American Planning Association*
 - Integration of mapping methodology into PGL's *Partnership for Building Reuse*
 - Full scale analysis of Tucson, Arizona and Jacksonville, Florida with new variables of interest
 - **The Atlas of ReUrbanism**





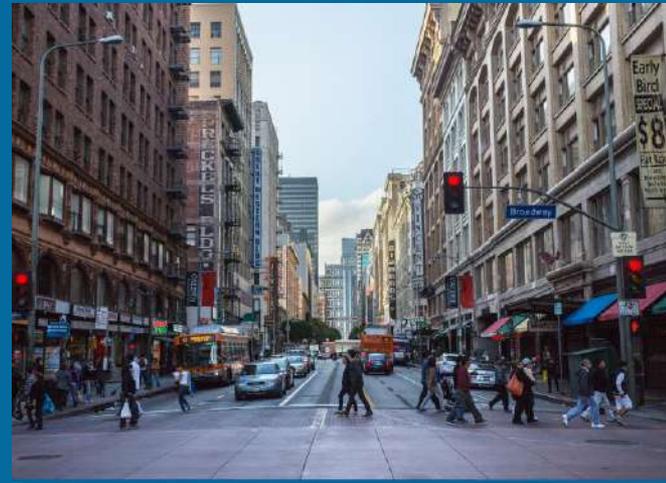
Older, Smaller, Better

Measuring how the character of buildings and blocks influences urban vitality

MAY 2014



www.preservationnation.org/greenlab



Untapped Potential: Strategies for Revitalization and Reuse

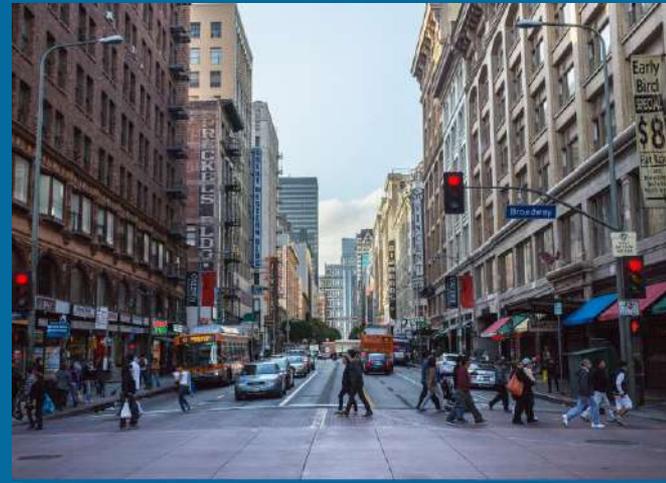
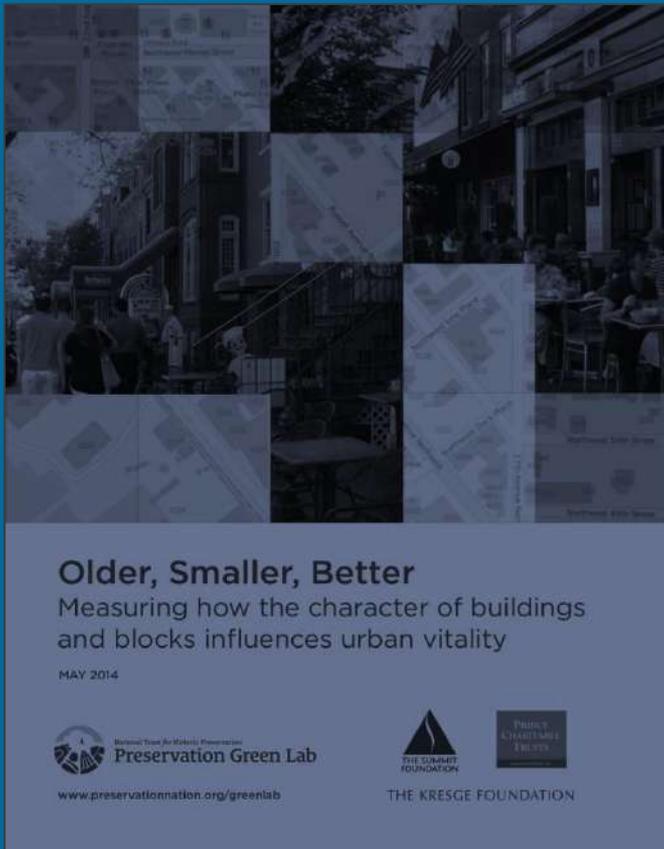
October 2017



Why?

+

How?

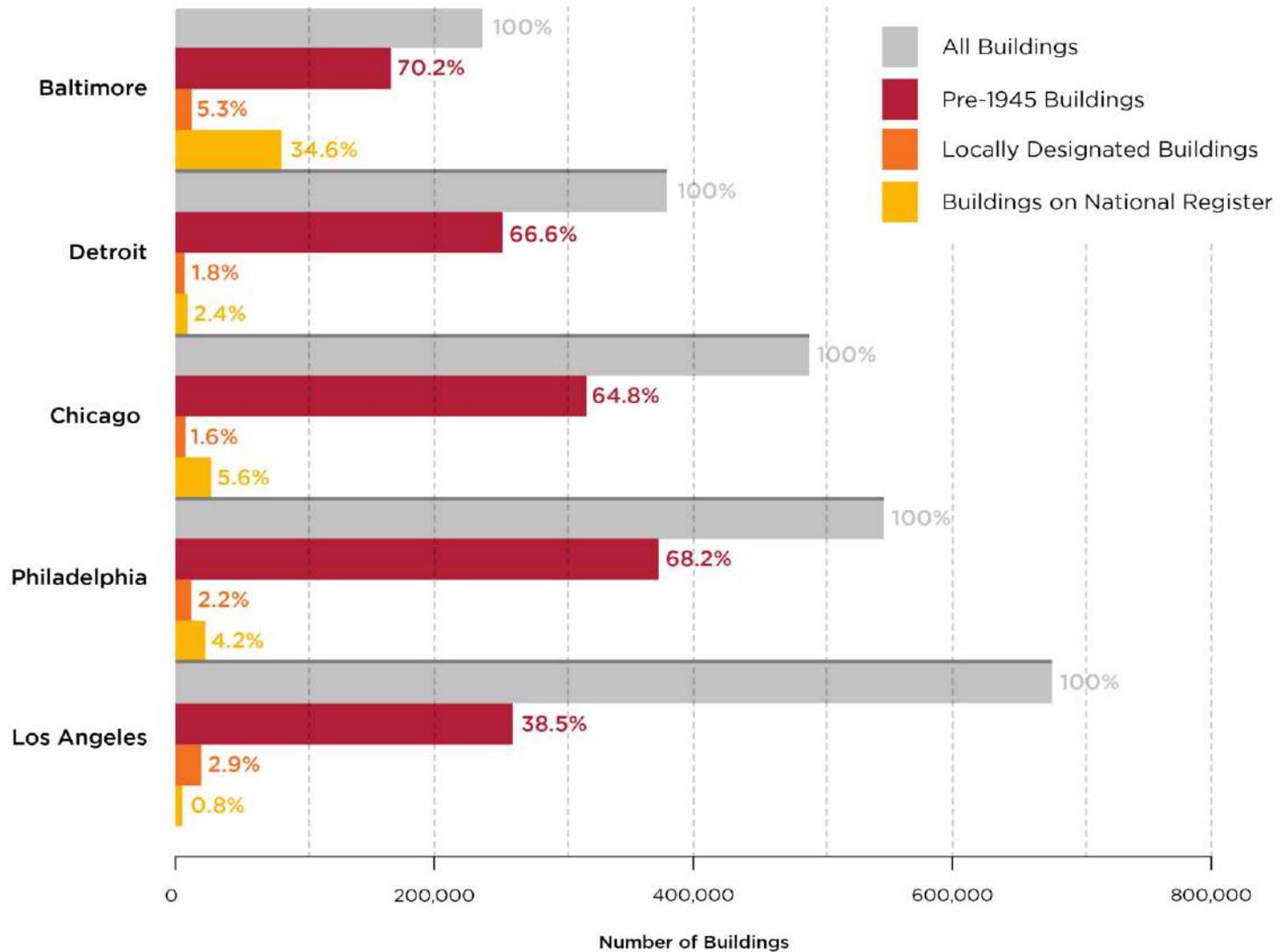


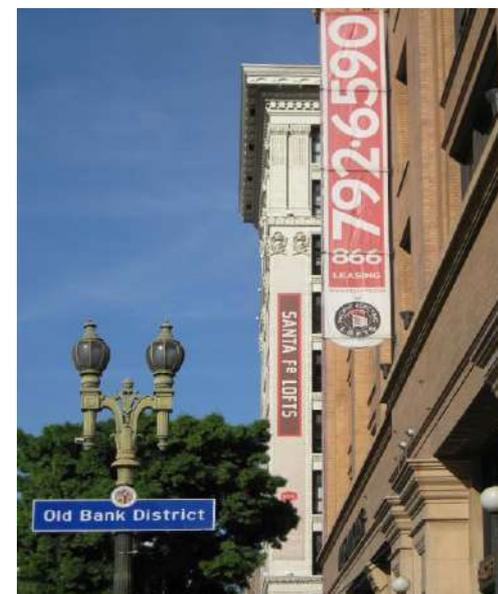
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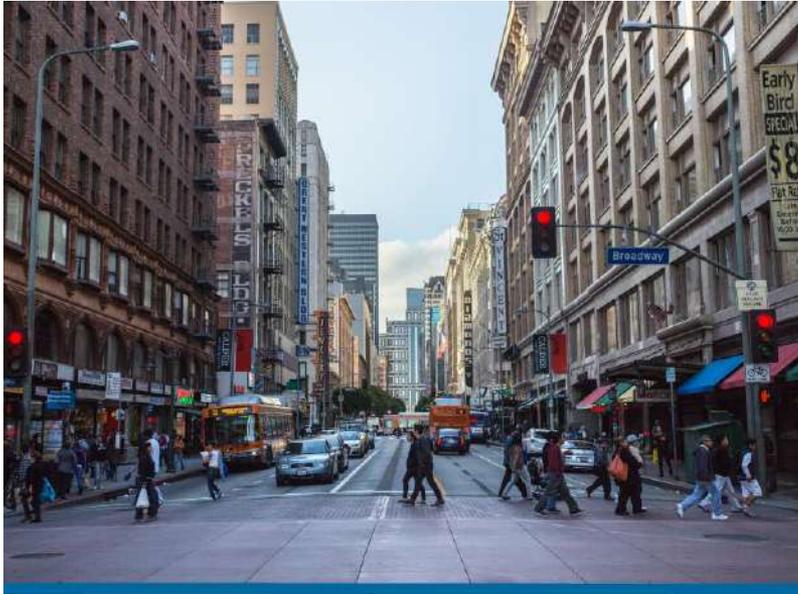
Existing Buildings and Historical Designation





Build on Success: LA's Adaptive Reuse Ordinance (ARO)

- Groundbreaking ordinance passed in 1999; expanded in 2013
- Removed zoning and building code barriers to reuse
- 60 building rehabilitations, 14,000 new residents
- Fewer projects since 2007



Untapped Potential:
Strategies for Revitalization
and Reuse

October 2017



Green Lab Solutions Partnership for Building Reuse

Brings together preservation, real estate, community development, and planning professionals to remove technical, financial, and regulatory barriers to make building reuse easier and more likely in major US cities.

The Partnership for Building Reuse Goals



National Trust *for*
Historic Preservation
Save the past. Enrich the future.



Urban Land
Institute

DETROIT
FUTURE
CITY |

- **Strengthen building reuse** to strengthen communities
- Identify common **barriers**
- Uncover hidden **opportunities**
- Share **best practices**
- Realize the potential for **sustainable development**

Local Expertise



- Real estate
- Architecture
- Planning
- Preservation
- Community development
- Sustainability
- Government
- Philanthropy

Assess Barriers and Identify Solutions



Regulatory Barriers
Zoning Code (Remington, Baltimore)



Market Barriers
Limited Demand (West Baltimore)

Build on Success



Miller's Court, Remington, Baltimore

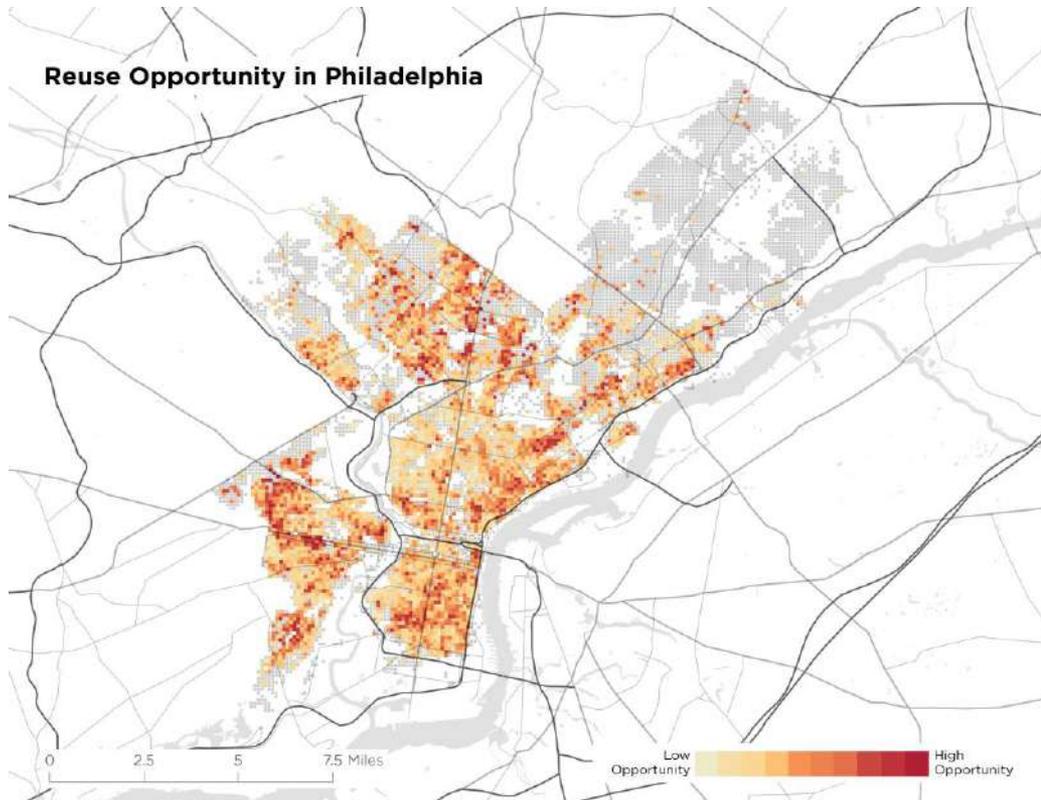


Highlight Opportunities



52nd St., West Philadelphia (left), American Ice Company, Baltimore (right)

Highlighting Opportunity



- Highlight areas of the city where building reuse could have greatest impact
- Build on “Character Score” mapping
- Apply additional data analysis
- Uncover new insights about opportunities in old neighborhoods



Older, Smaller, Better

Measuring how the character of buildings and blocks influences urban vitality

MAY 2014



www.preservationnation.org/greenlab



Unlocking the Potential of Detroit's Neighborhoods:

The Partnership for Building Reuse

August 2016



DETROIT
FUTURE
CITY

Why?

+

How?



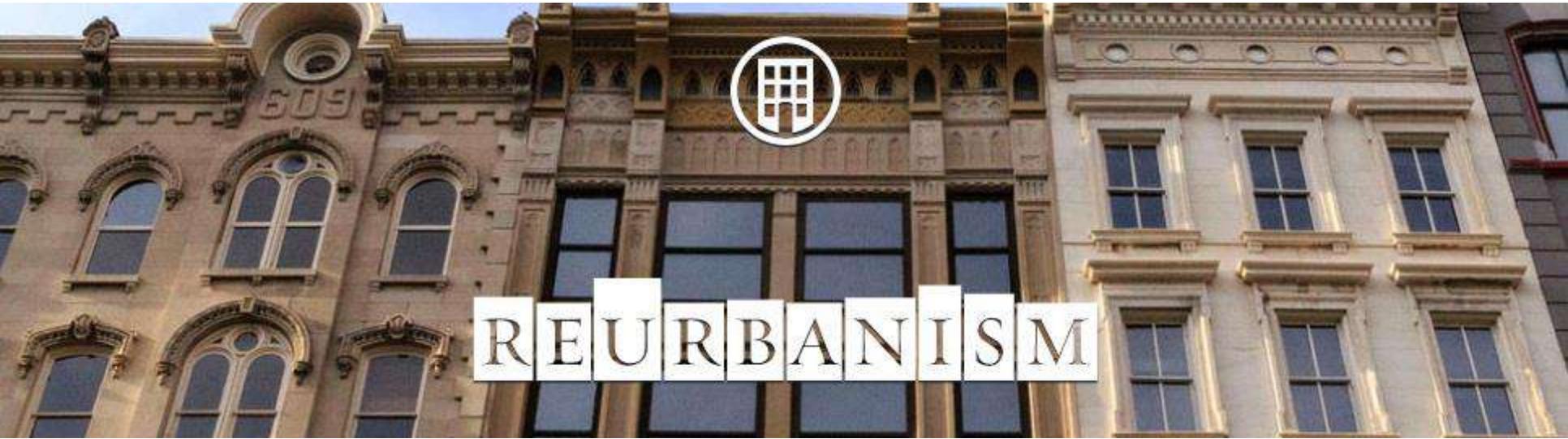
Current Projects





REURBANISM

Shaping Communities Through Reuse

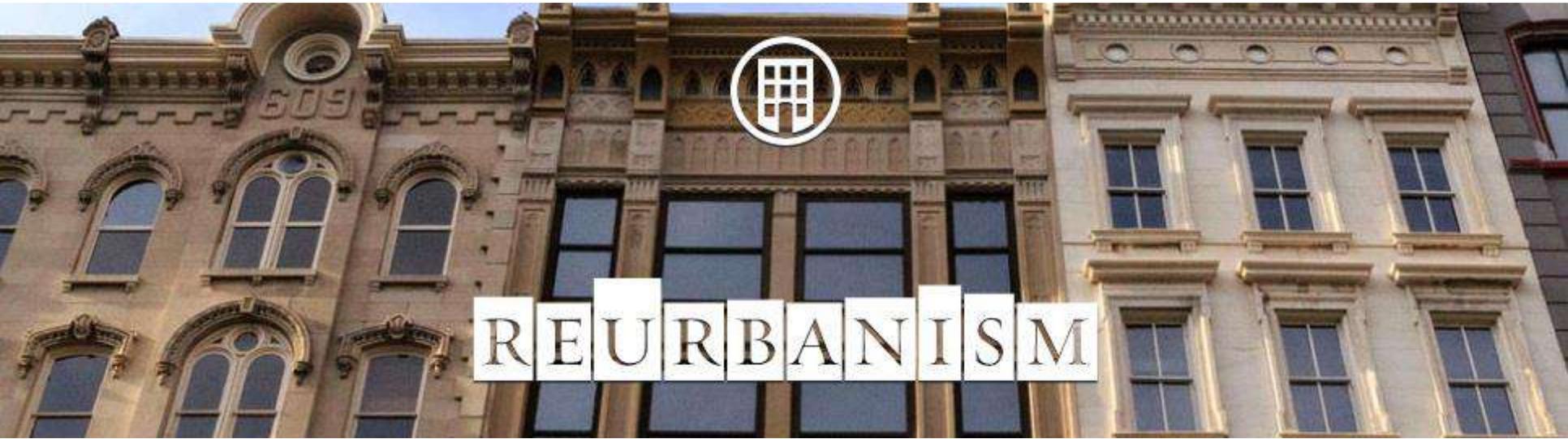


REURBANISM





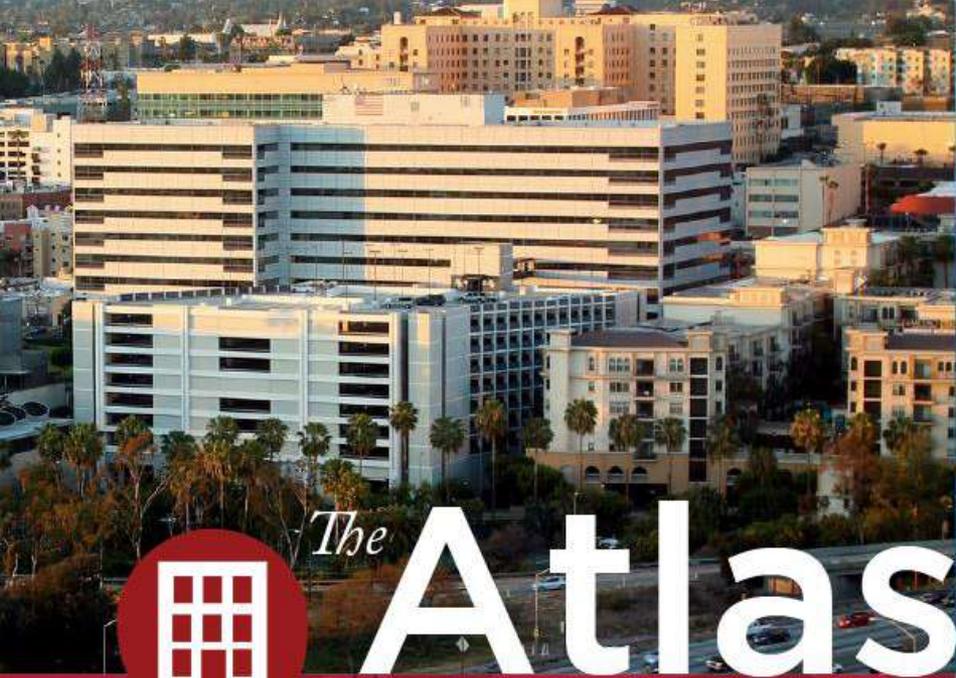
- Reuse, Reinvest, Reinforce. Reurbanism.



- Reuse, Reinvest, Reinforce. Reurbanism.
- Make building reuse the default option in U.S. cities



- Reuse, Reinvest, Reinforce. Reurbanism.
- Make building reuse the default option in U.S. cities
- Engage density, diversity, affordability, displacement, equity. Serious challenges and serious solutions.

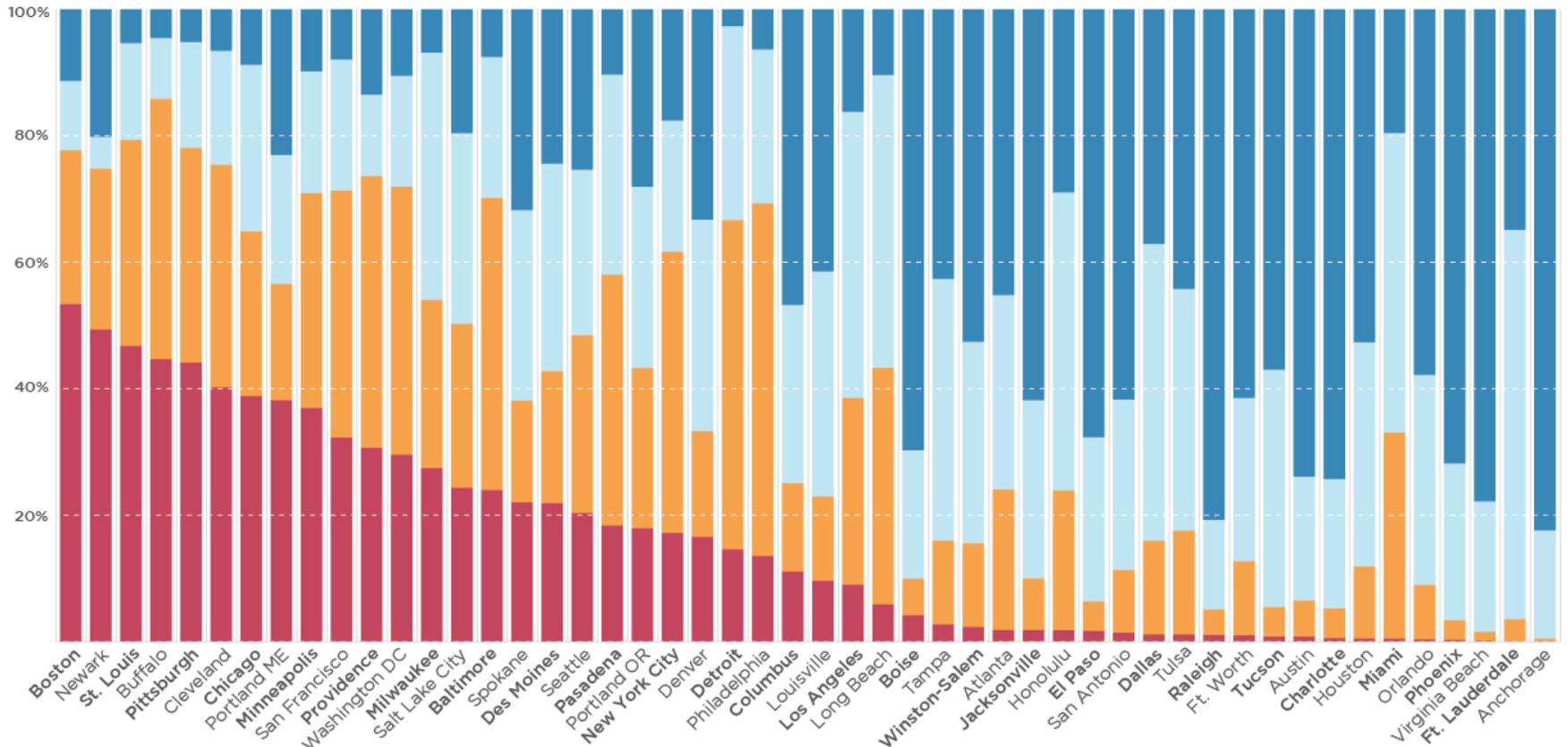


The Atlas of

ReUrbanism

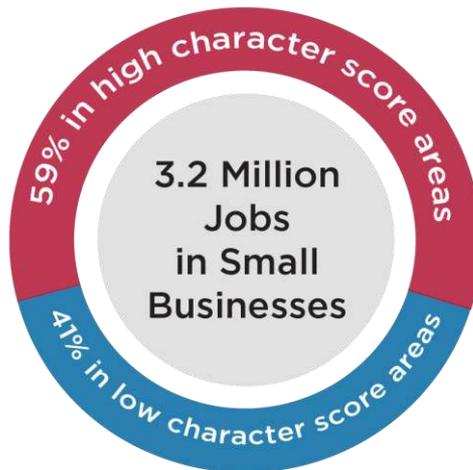
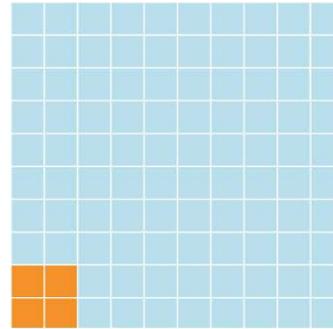


The Atlas of ReUrbanism: Summary Report



Findings for 50+ Cities

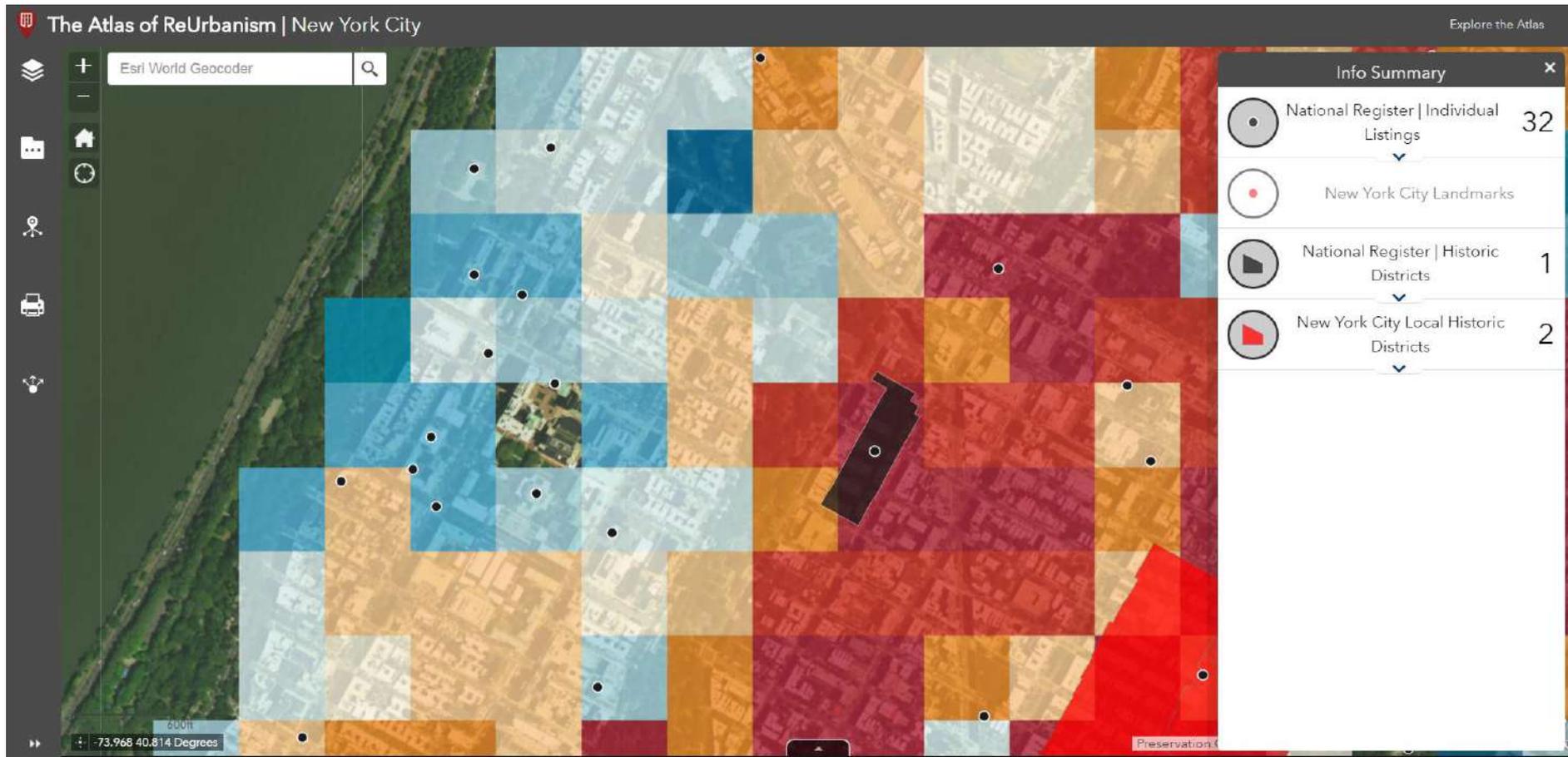
4.3%
of all
buildings
are locally
landmarked



The Atlas of ReUrbanism: Interactive Maps



The Atlas of ReUrbanism: Interactive Maps



The Atlas of ReUrbanism: City-Specific Factsheets



New York, NY

301.5 mi² | Pop: 8,550,405 | Most Populous U.S. City | Est. 1624

Blocks of older, smaller, mixed-age buildings play a critical role in fostering robust local economies, inclusive neighborhoods, and sustainable cities. The Preservation Green Lab report, *Older, Smaller, Better*, leveraged the ideas of **Jane Jacobs** to show why preservation and building reuse matter for successful communities. The *Atlas of ReUrbanism* expands this research to 50 U.S. cities, demonstrating that **Character Counts**.

In **New York**, compared to areas with large, new structures, character-rich **blocks of older, smaller, mixed-age buildings** contain...



Nearly twice as many women and minority-owned businesses



Twice the number of jobs in small and new business



More diverse residents in terms of race, country of origin, and sexual orientation

The building blocks for an inclusive, diverse, economically vibrant city, New York's older, smaller buildings are irreplaceable assets. For more information about New York's high-character areas, **please see reverse**.

The Atlas of ReUrbanism | A Tool for Discovery

Developed by the **Preservation Green Lab**, the Atlas of ReUrbanism is part of the National Trust for Historic Preservation's ReUrbanism initiative. Explore the buildings and blocks of New York and other American cities further by visiting:

www.atlasofreurbanism.com

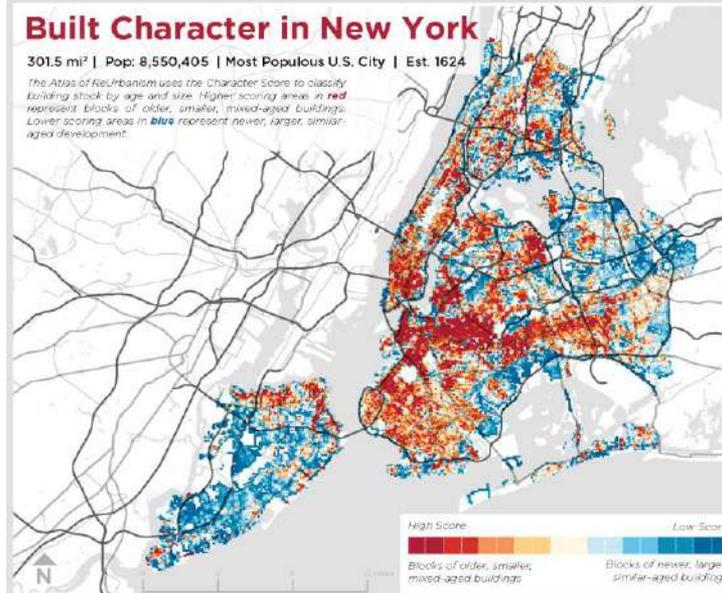


Preservation Green Lab

Built Character in New York

301.5 mi² | Pop: 8,550,405 | Most Populous U.S. City | Est. 1624

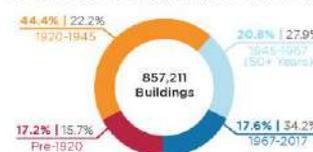
The Atlas of ReUrbanism uses the Character Score to classify building stock by age and size. Higher scoring areas in red represent blocks of older, smaller, mixed-aged buildings. Lower scoring areas in blue represent newer, larger, similar-aged development.



Building and Preservation Facts

Parcels/Buildings	New York	50-City Average
Total	857,211	204,038
Per Square Mile	2,844	1,436
Median Year Built	1931	1952
On Nat'l Register of Historic Places	3.9%	6.8%
Locally Designated	3.5%	4.3%
Historic Tax Credit Projects	95	275

Year Built By Period, New York | 50-City Average



High v. Low Character Score

Use the table below to compare high- and low-character score areas in terms of their density and diversity, inclusiveness, and economic vitality.

	High Character Score Areas	Low Character Score Areas
Density & Diversity		
Avg. Population/Grid Square ¹	598.7	198.2
Median Age (Years) ²	35.8	40.3
Avg. Between Age 18-34 ³	27.5%	22.0%
Avg. Foreign Born ⁴	36.6%	32.5%
Avg. New to County ⁵	3.4%	3.1%
Avg. People of Color ⁶	64.8%	54.2%
Avg. Housing Units/Grid Square ¹	164.8	81.6
Avg. Vacant Homes ⁷	8.6%	6.2%
Avg. Owned Homes ⁸	38.8%	54.3%

Inclusiveness

	High Character Score Areas	Low Character Score Areas
Total Women and Minority-Owned Businesses ^{9,10}	20,241	10,579
Avg. Affordable Rental Housing Units ¹¹	73.8%	74.2%

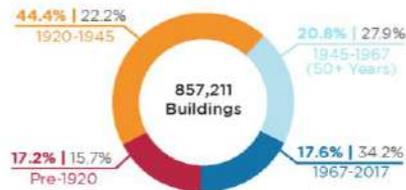
Economic Vitality

	High Character Score Areas	Low Character Score Areas
Total Jobs in Small Businesses ¹²	496,355	179,943
Total Jobs in New Businesses ¹³	111,063	59,578
Total Jobs in Creative Industries ¹⁴	455,879	202,521

¹ Data from the 2010 Census
² Data from the 2010 Census
³ Data from Data & Research, 2015
⁴ Data from LEAD, 2008, 2016

The Atlas of ReUrbanism: City-Specific Factsheets

Year Built By Period, New York | 50-City Average



Density & Diversity

Avg. Population/Grid Square [†]	398.7	198.2
Median Age (Years) [†]	35.8	40.3
Avg. Between Age 18-34 [†]	27.5%	22.9%
Avg. Foreign Born ^{**}	36.8%	32.5%
Avg. New to County ^{**}	3.4%	3.1%
Avg. People of Color [†]	64.8%	54.2%
Avg. Housing Units/Grid Square [†]	164.8	81.6
Avg. Vacant Homes [†]	8.6%	6.2%
Avg. Owned Homes [†]	38.8%	54.3%



Nearly twice as many women and minority-owned businesses



Twice the number of jobs in small and new business



More diverse residents in terms of race, country of origin, and sexual orientation

- Facts on the contributions of **high** character score vs. **low** character areas
- Preservation-applicable information, including median year built and registered properties
- Topline statistics on how high character areas stand out

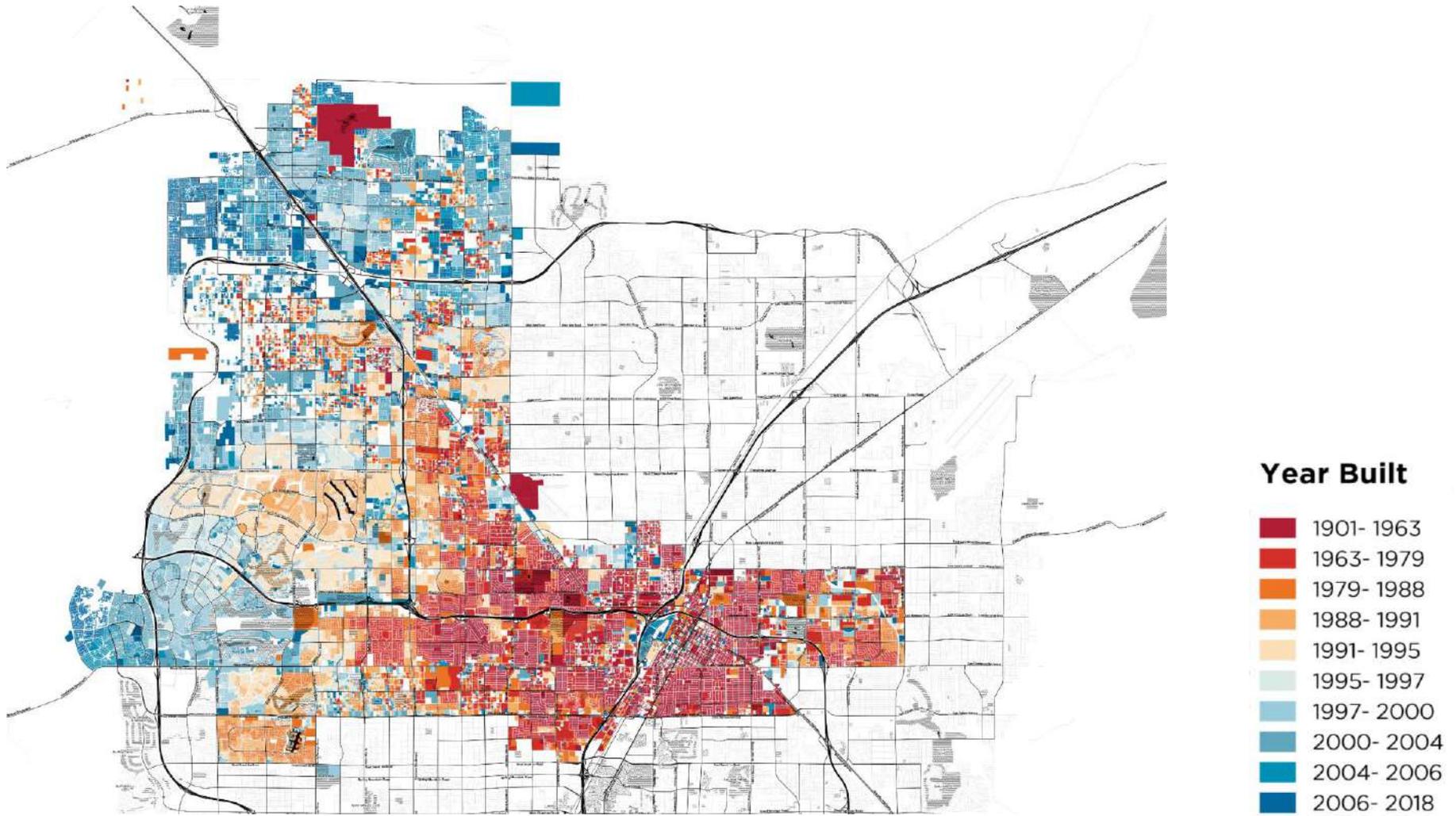
An aerial night photograph of Las Vegas, showing a dense grid of city lights and illuminated buildings. The lights are primarily yellow and white, with some blue and purple accents. The city is set against a dark background, and the overall scene is a vibrant display of urban illumination.

**What can we
learn about Las
Vegas?**

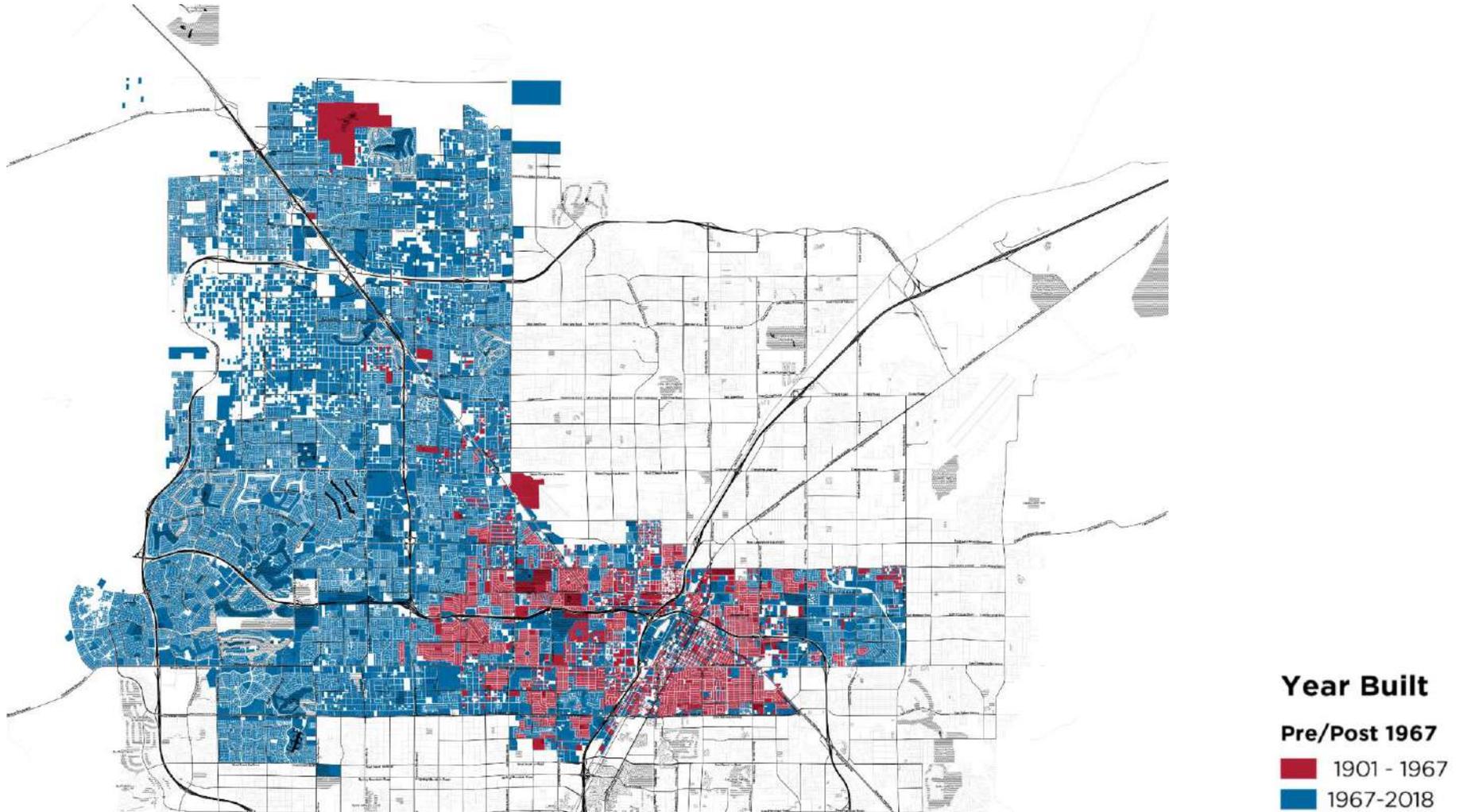
Building Age Data in Las Vegas



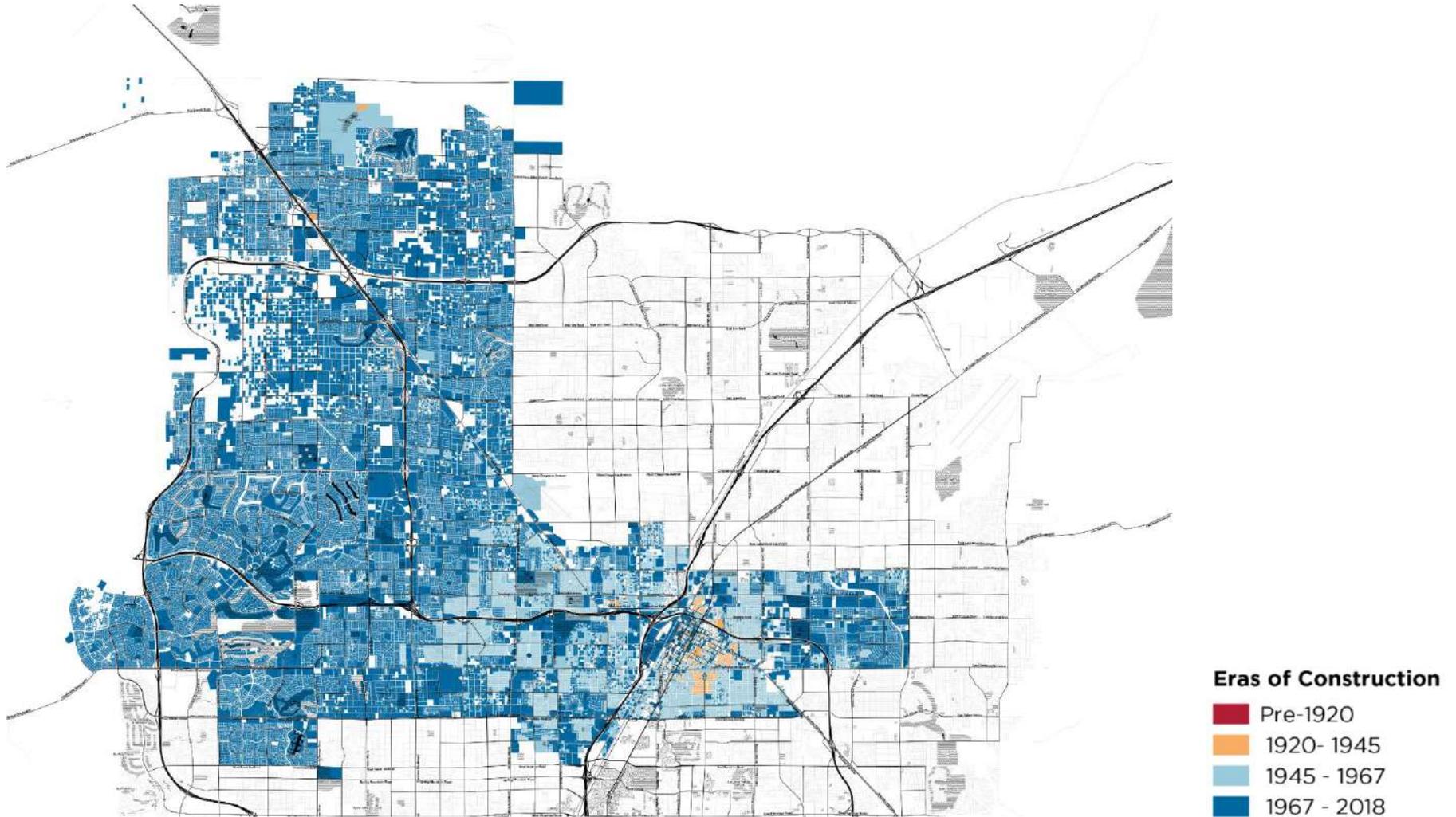
Building Age in Las Vegas



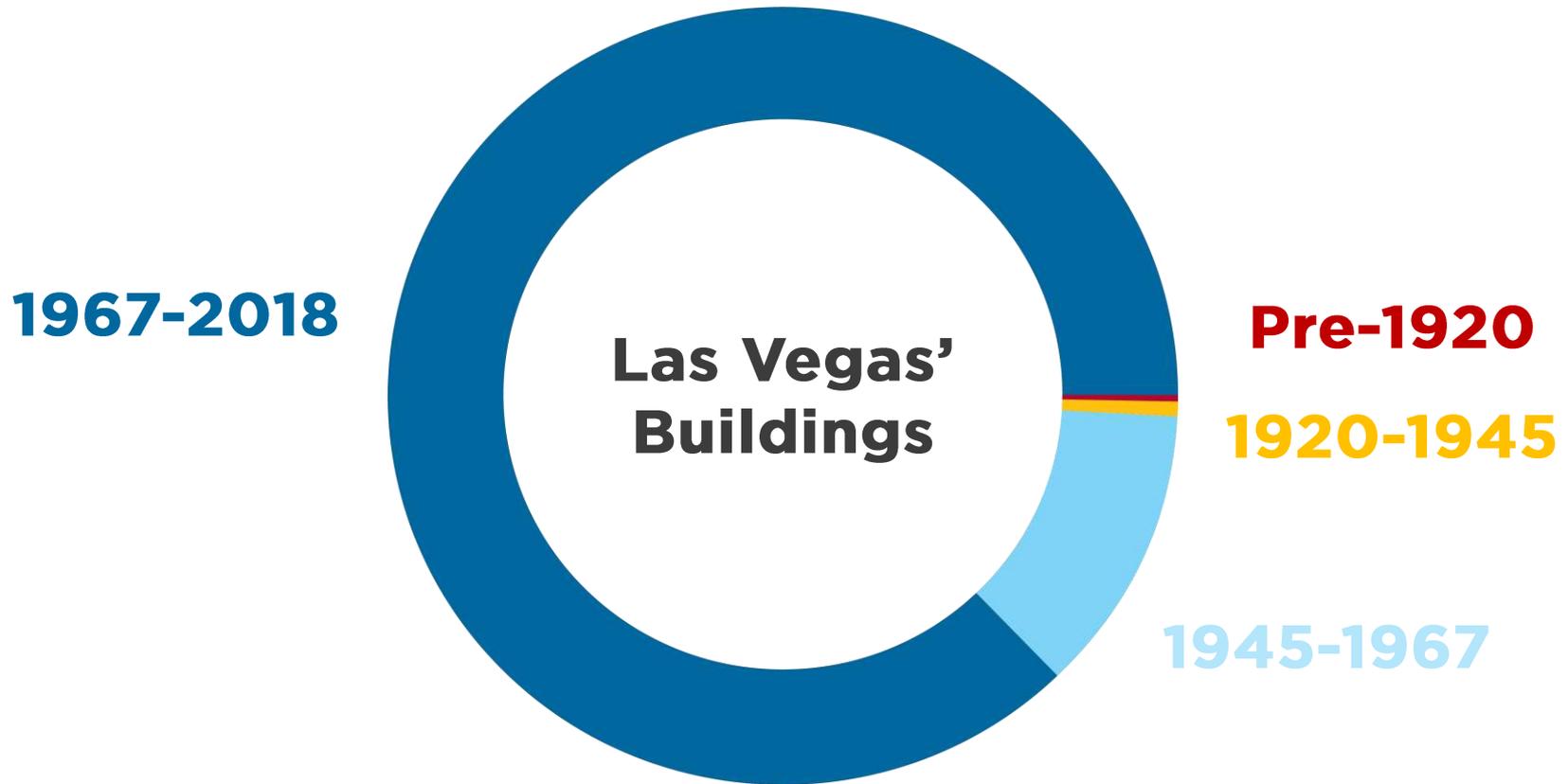
Building Age in Las Vegas



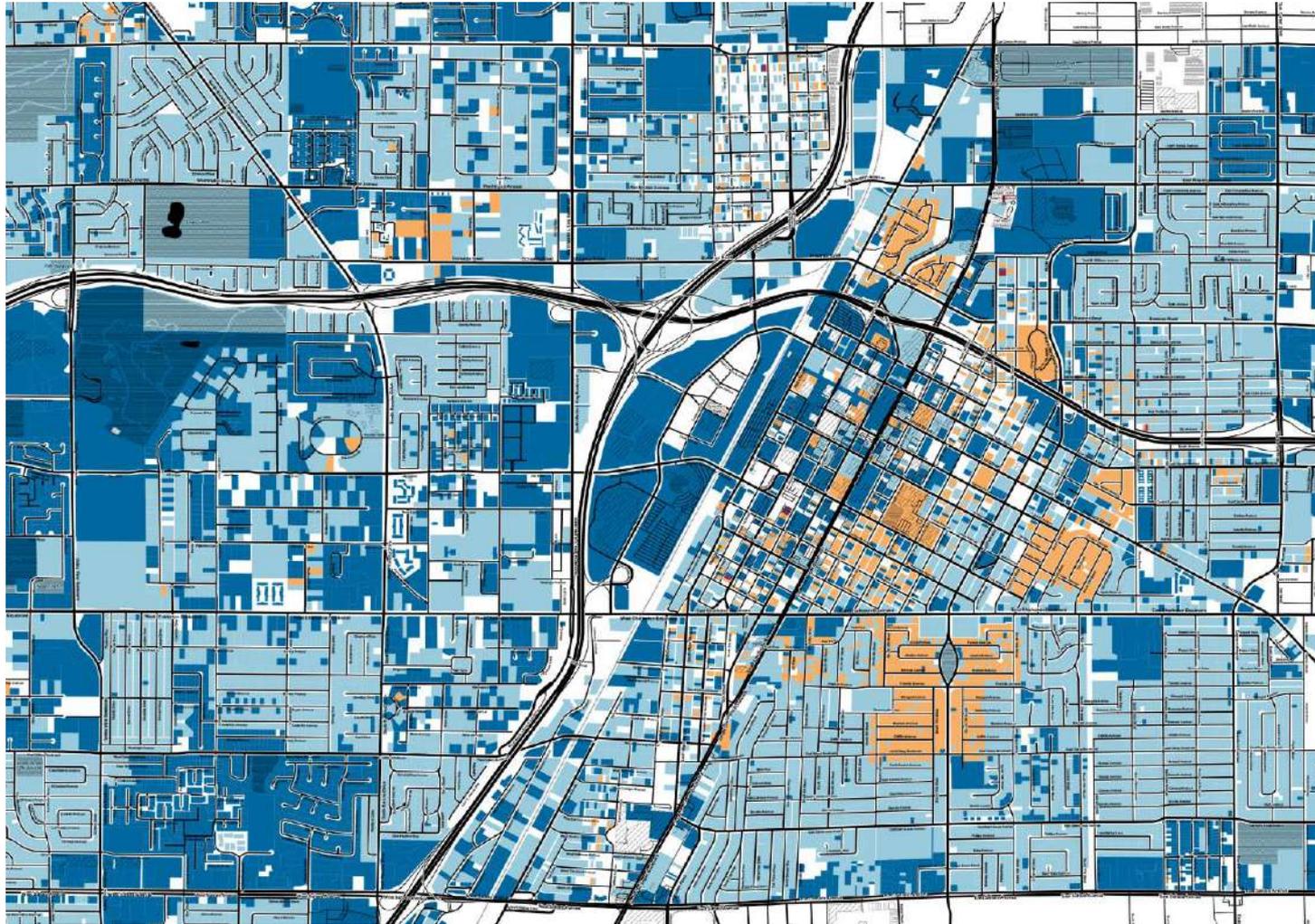
Building Age in Las Vegas



Las Vegas by Era of Construction



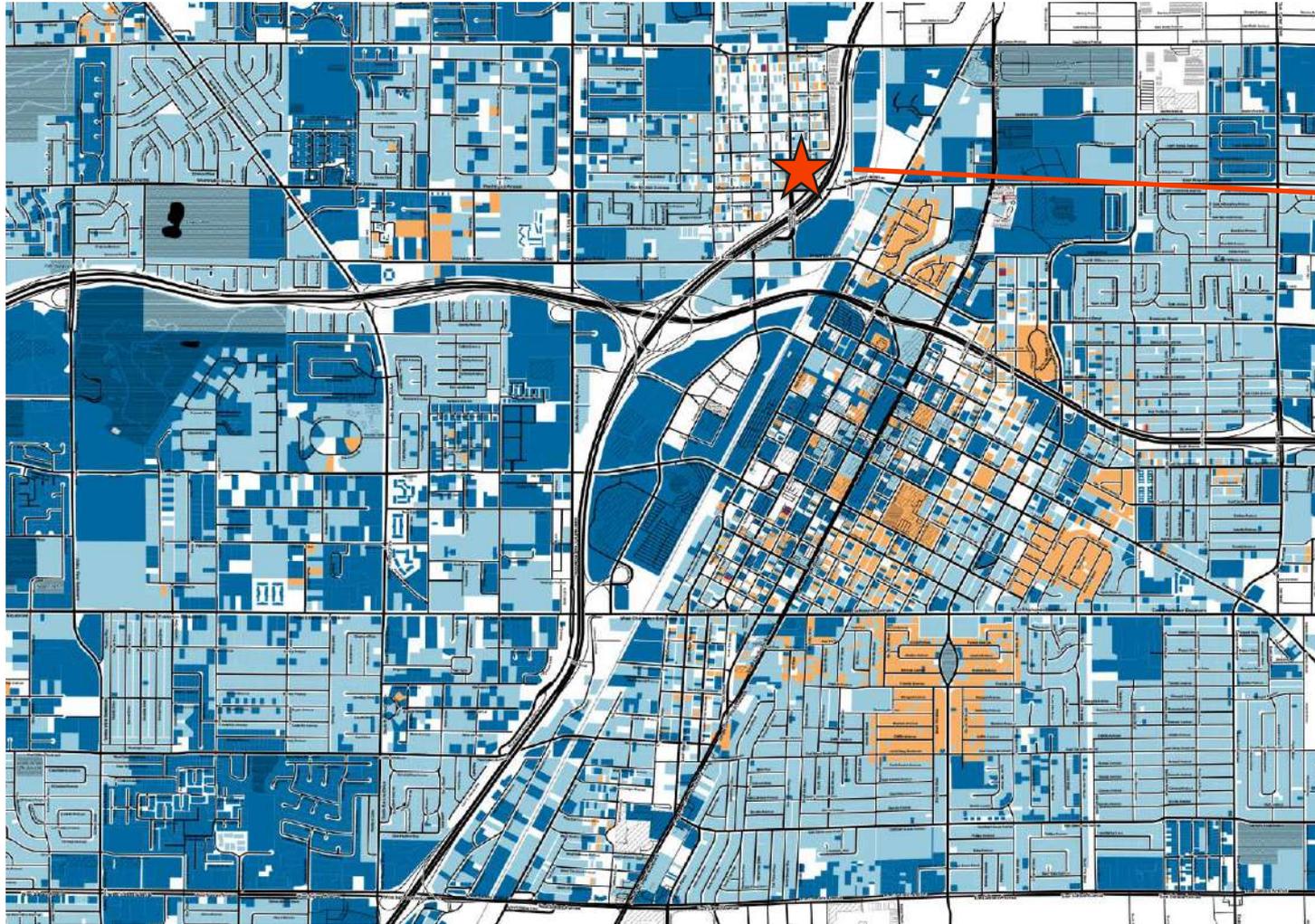
Building Age in Las Vegas



Eras of Construction

- Pre-1920
- 1920- 1945
- 1945 - 1967
- 1967 - 2018

Building Age in Las Vegas



You Are Here!

Eras of Construction

- Pre-1920
- 1920- 1945
- 1945 - 1967
- 1967 - 2018



The Atlas of ReUrbanism

Buildings and blocks in
American cities

NOVEMBER 2016



National Trust for Historic Preservation
Preservation Green Lab

Thank you!

www.savingplaces.org
www.savingplaces.org/green-lab



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