

What would 100,000 people per square mile look like?



C_W_H, FAIA/SOM

SOM

Is it desirable?



C_W_H, FAIA/SOM

SOM

Is it necessary?

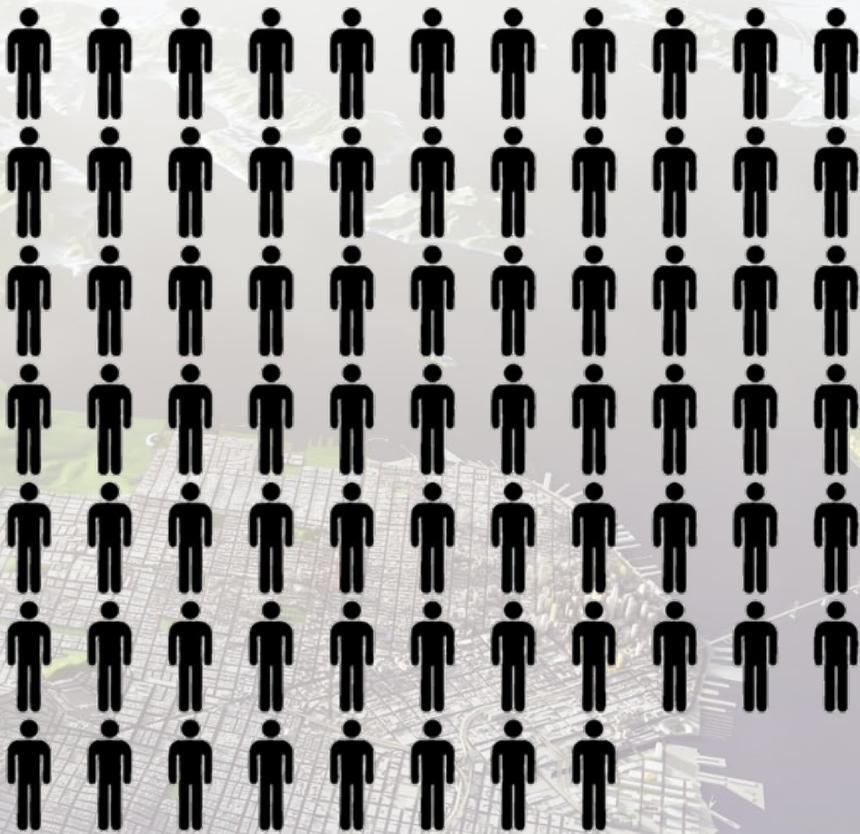


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World Population

6.7 Billion



2011

Source: United Nations

C_W_H, FAIA/SOM

SOM

World Population

9.2 Billion

2035

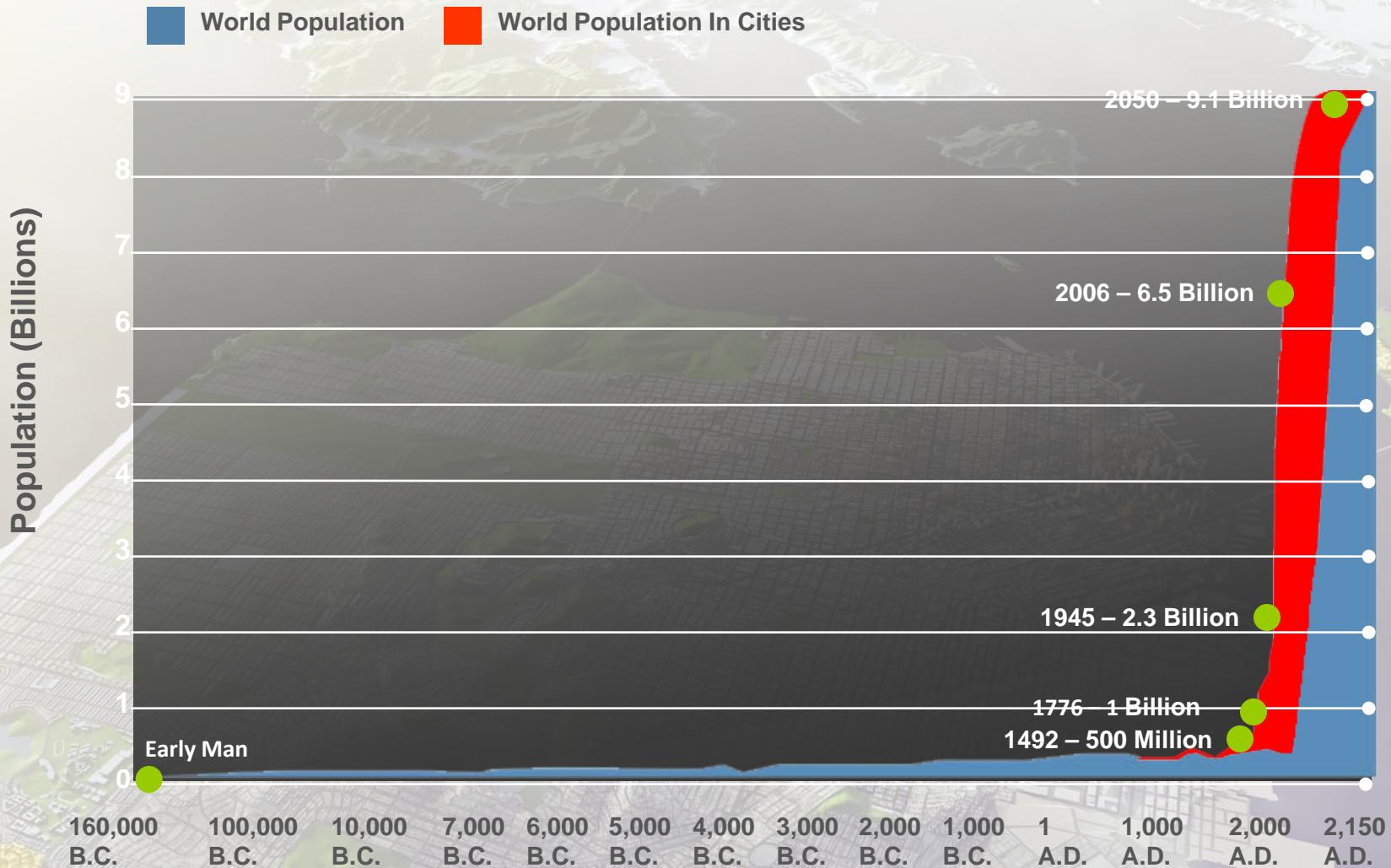
Source: United Nations



C_W_H, FAIA/SOM

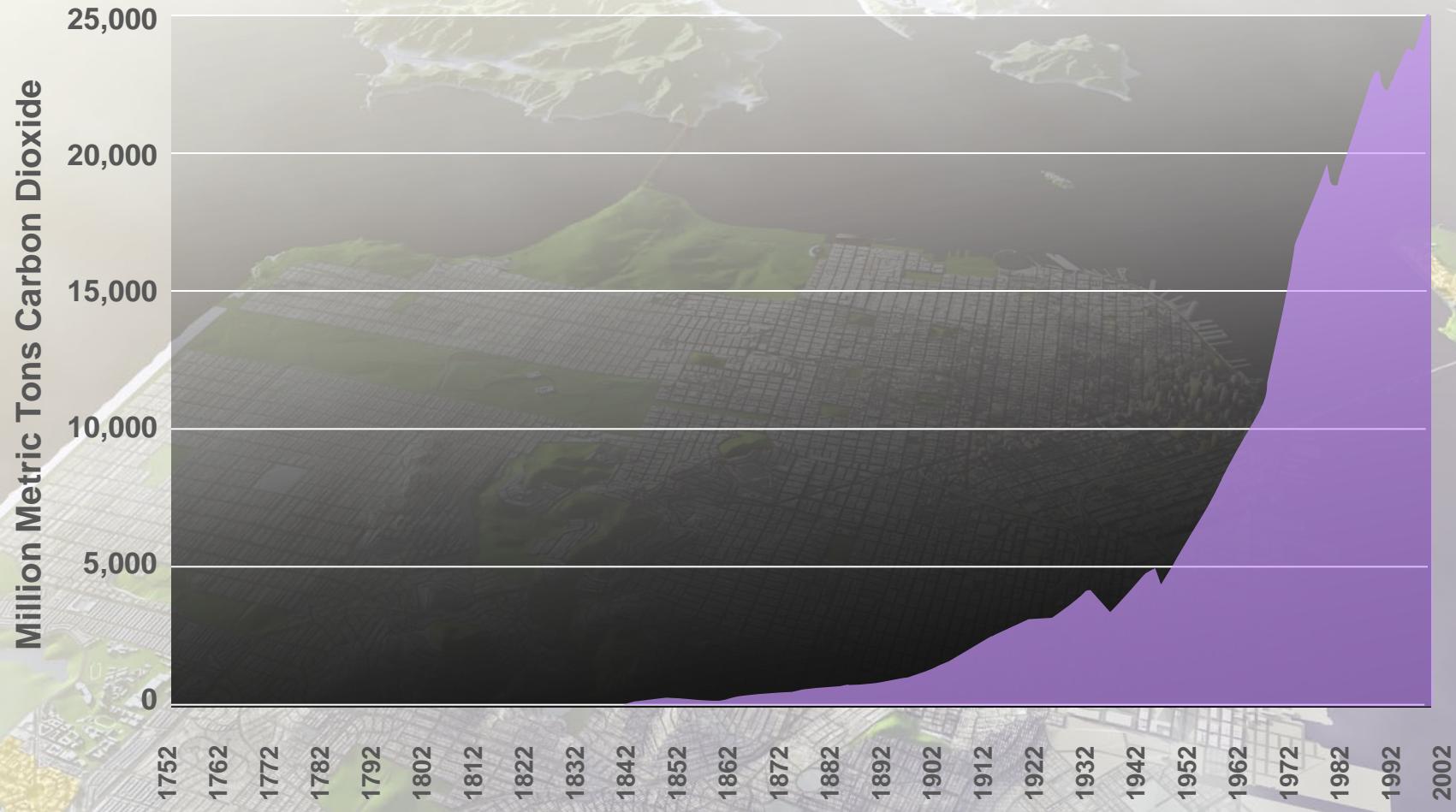
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Population Growth Throughout History



Source: United Nations

Global CO₂ Emissions



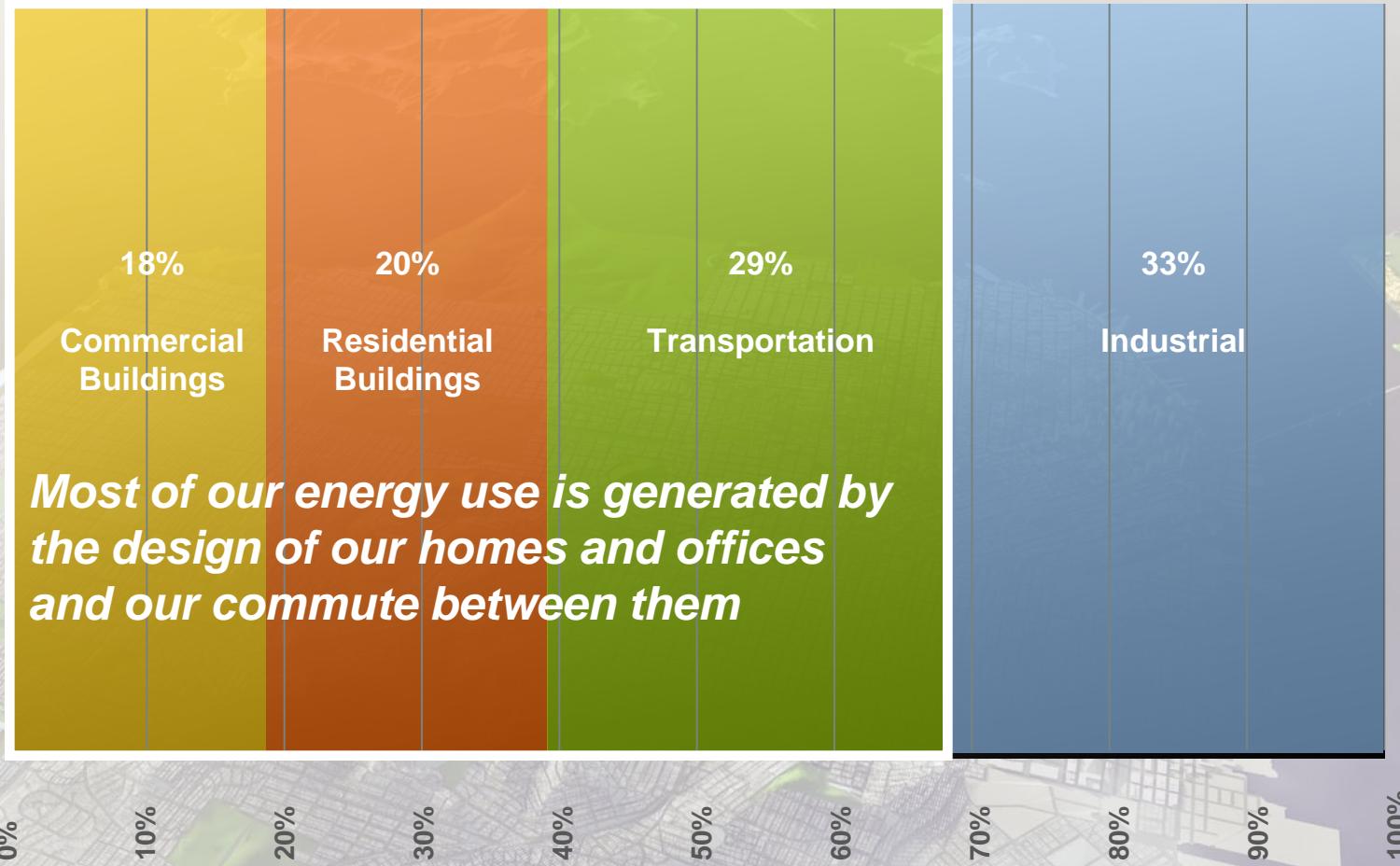
Source: Environmental Protection Agency

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Energy Consumption by End-Use

C_W_H, FAIA/SOM

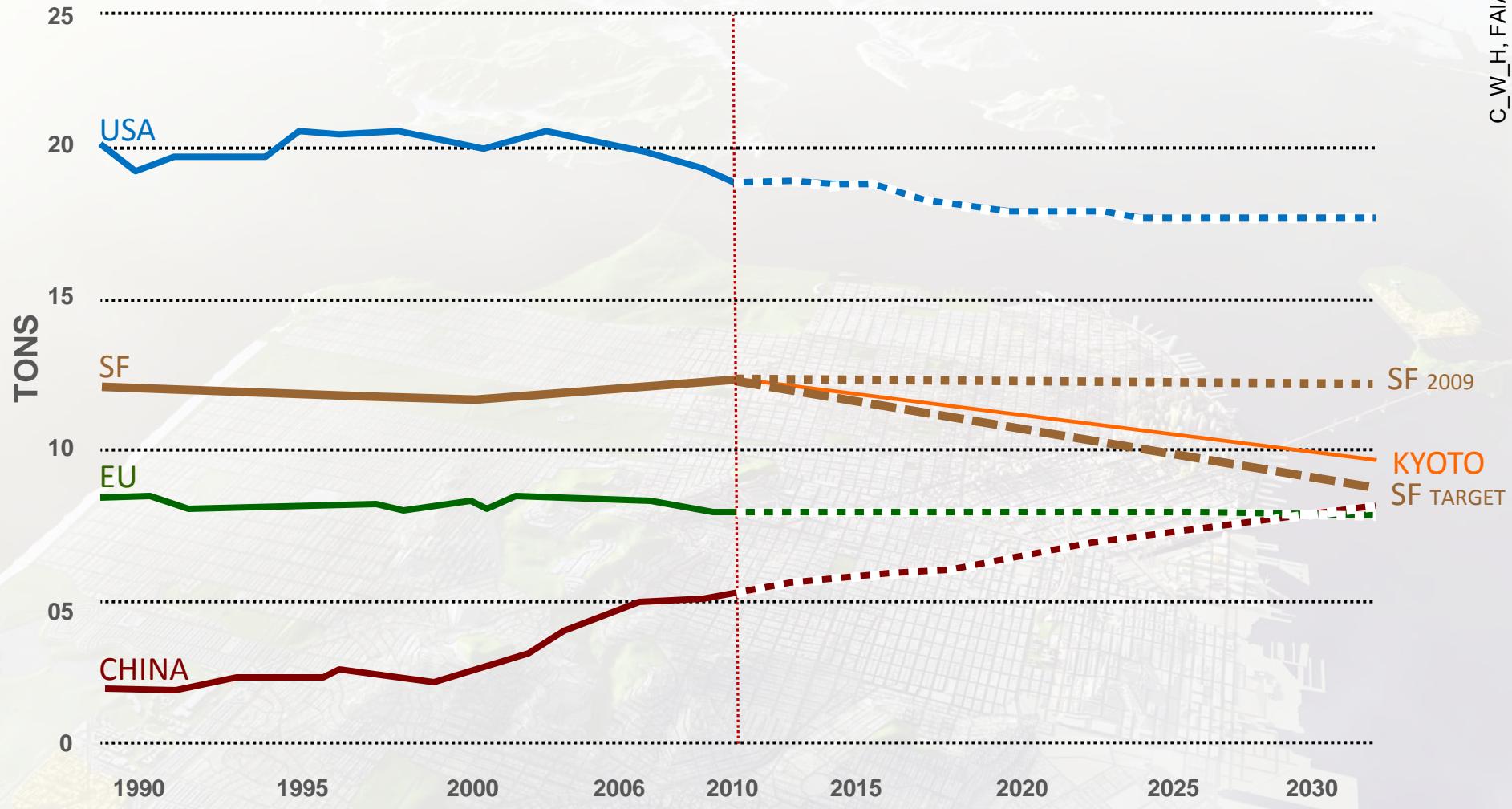


Source: U.S. Energy Consumption by End-Use, 2003

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CO2 Emissions per Capita

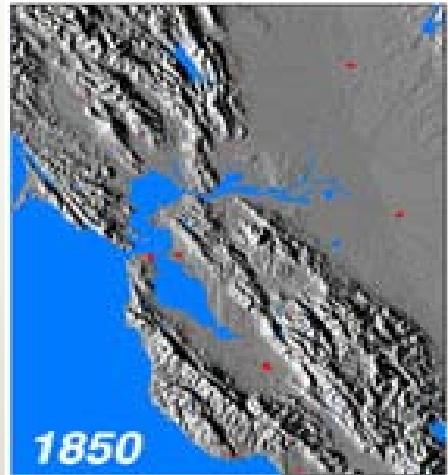
C_W_H, FAIA/SOM



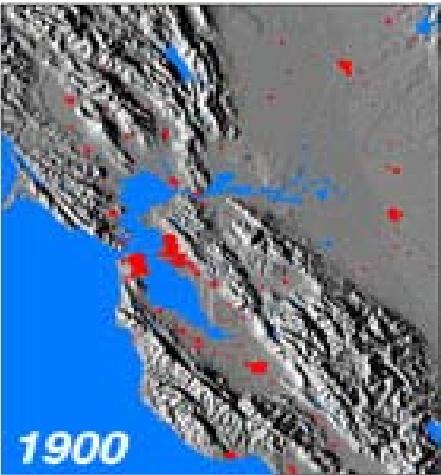
Source: EIA Annual 2006 and World Energy Projections Plus 2009

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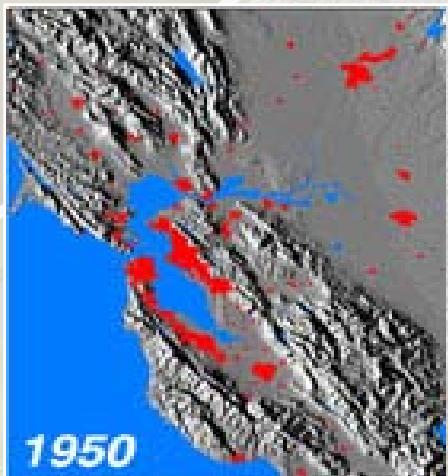
Un-Sustainable Growth Patterns?



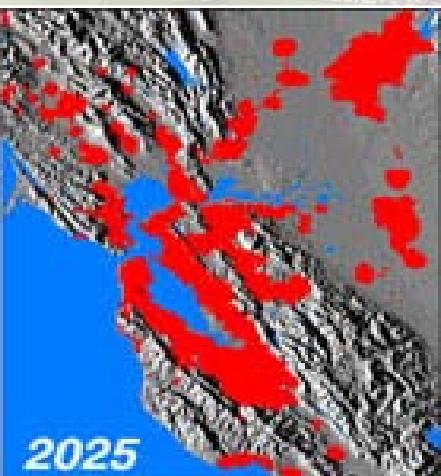
1850



1900



1950



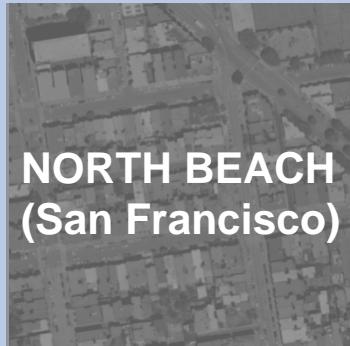
2025

Bay Area
Population
2010: 6,960,000
2035: 8,960,000

San Francisco
Population
2010: 850,000
2035: ?

Source: Association of Bay Area Governments

Sustainability: A Tale of Two Neighborhoods



NORTH BEACH
(San Francisco)



HERCULES
(Contra Costa)



C_W_H, FAIA/SOM

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Overconsumption of Resources

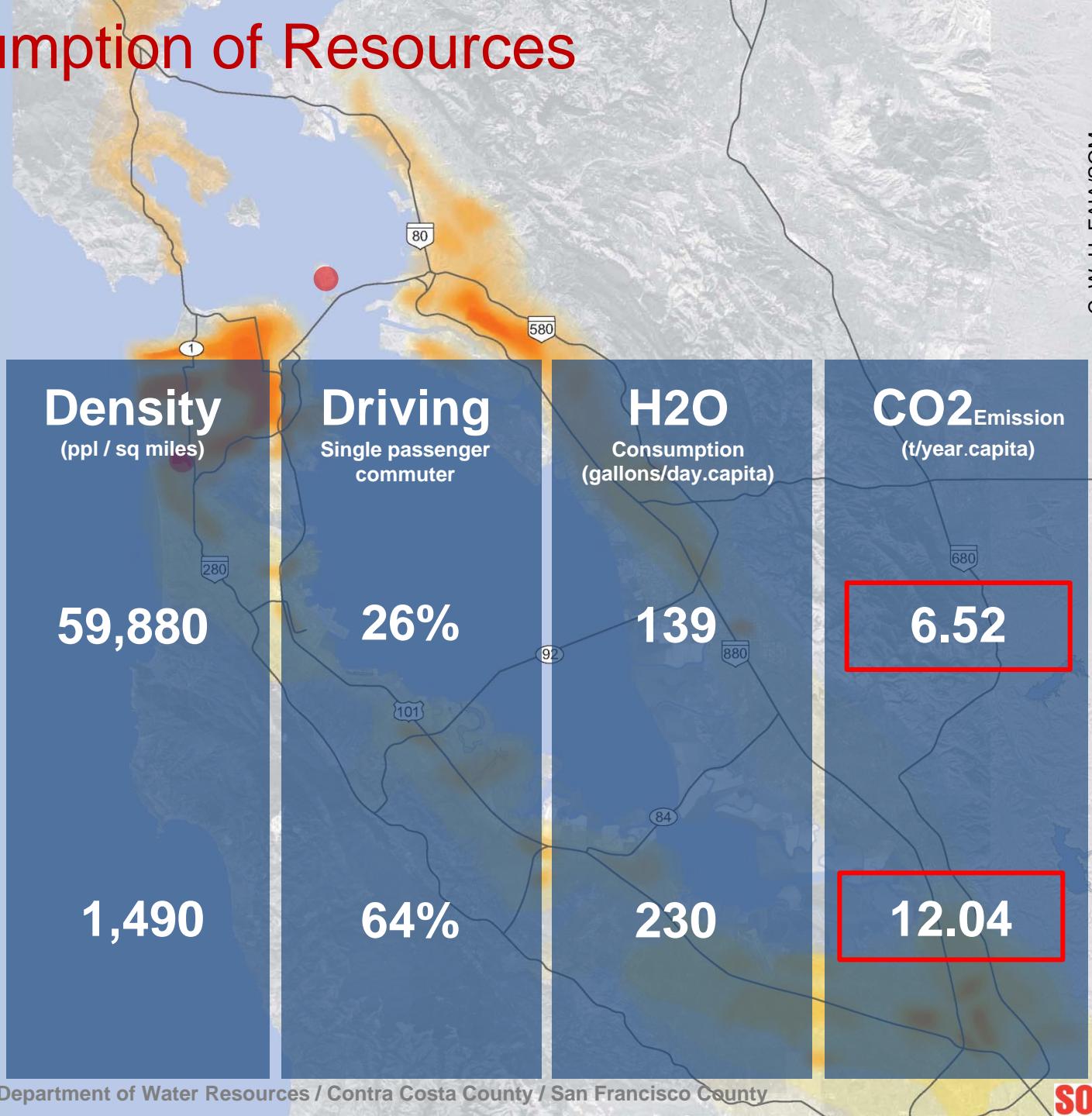
C_W_H, FAIA/SOM



NORTH BEACH
(San Francisco)

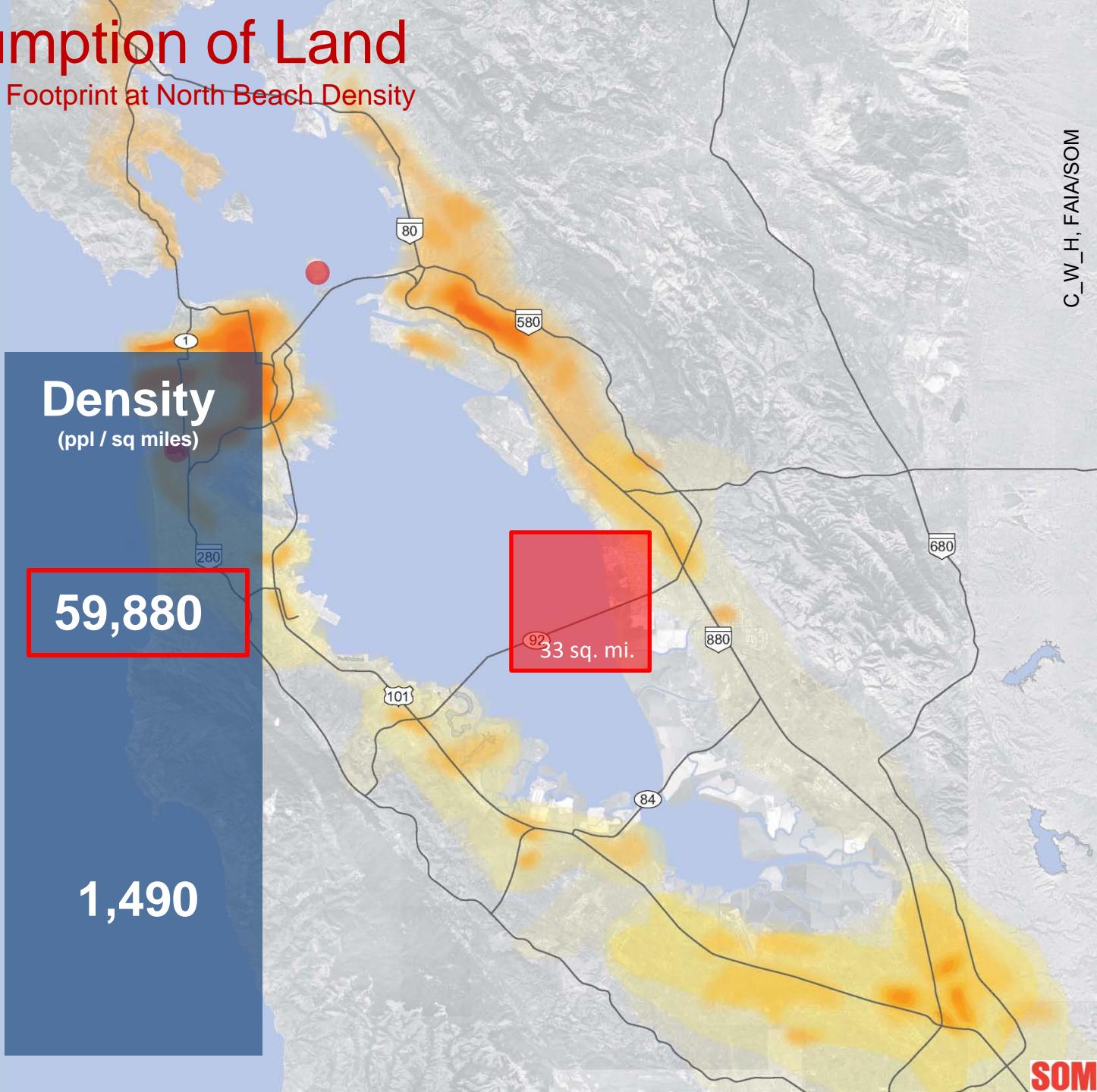


HERCULES
(Contra Costa)



Overconsumption of Land

2035 Bay Area Growth Footprint at North Beach Density



Overconsumption of Land

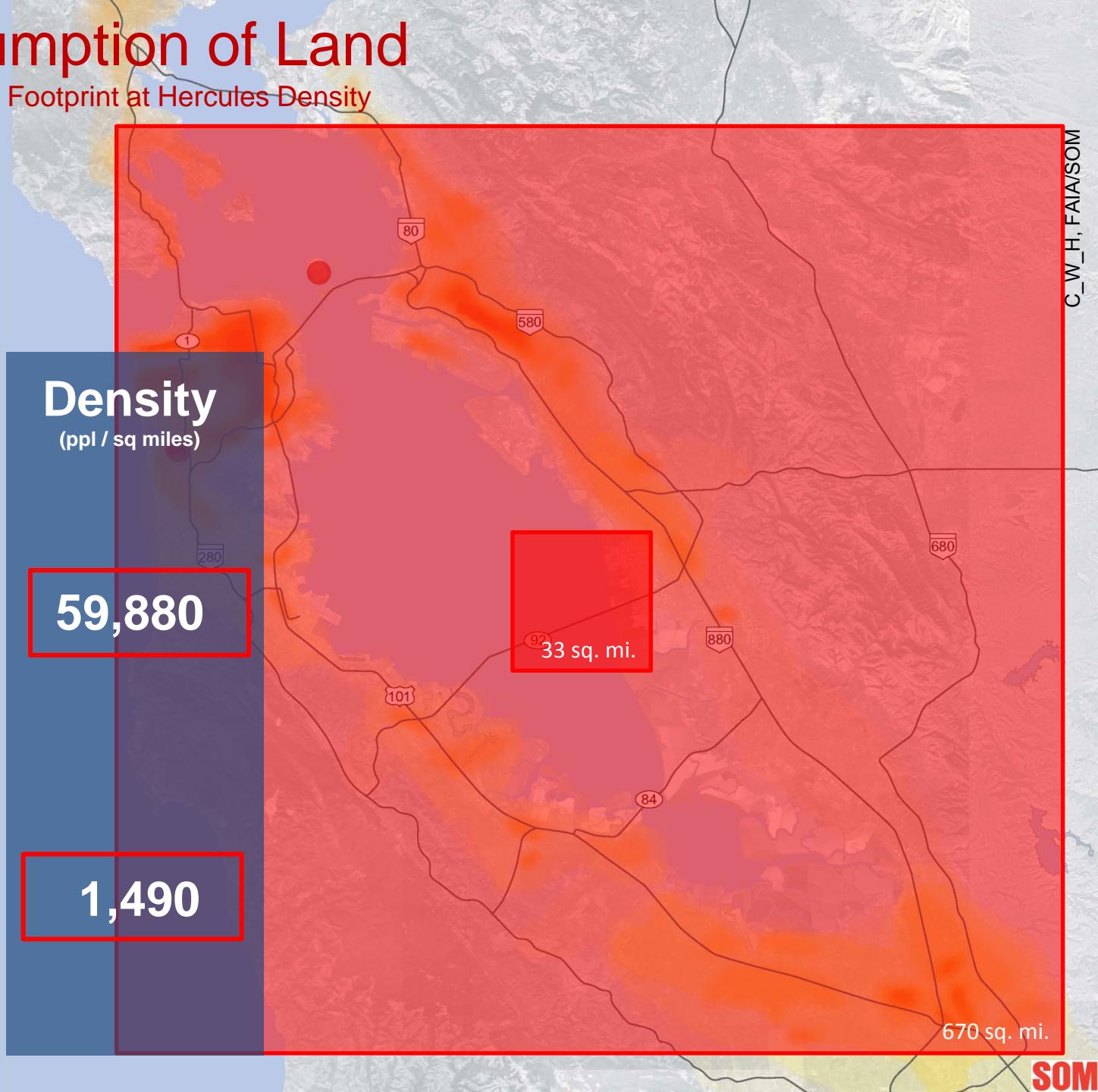
2035 Bay Area Growth Footprint at Hercules Density



NORTH BEACH
(San Francisco)



HERCULES
(Contra Costa)



The Next 2 Million : Changing the Paradigm

Current Densities, Bay Area Urban Cores

NORTH BEACH:
59,880 people/sq.mi

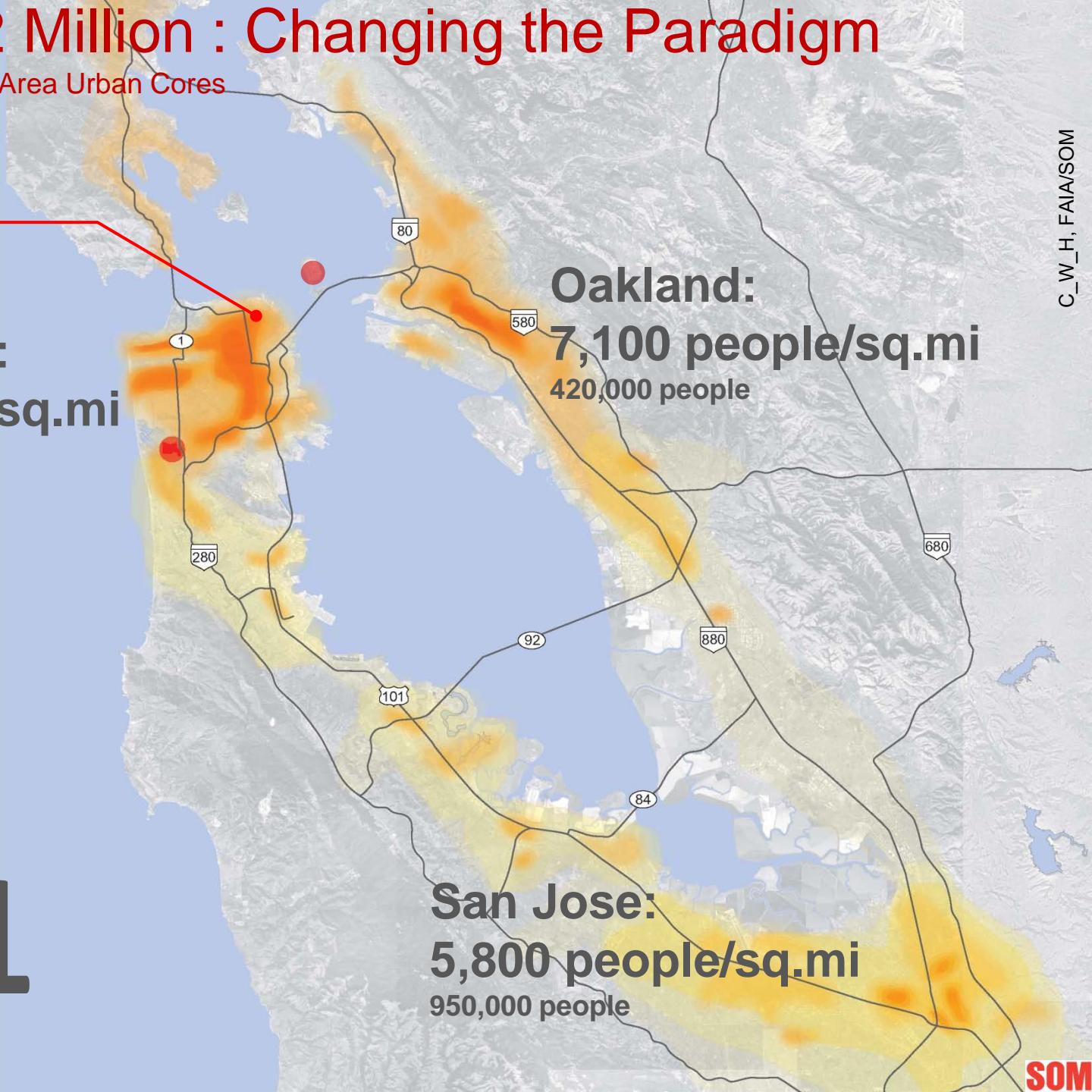
San Francisco:
17,100 people/sq.mi
800,000 people

Oakland:
7,100 people/sq.mi
420,000 people

San Jose:
5,800 people/sq.mi
950,000 people

2011

Source: US Census



SOM

The Next 2 Million : Changing the Paradigm

Current Densities, Bay Area Urban Cores

C_W_H, FAIA/SOM

NORTH BEACH:

59,880 people/sq.mi

San Francisco:

17,100 people/sq.mi

800,000 people

Oakland:

7,100 people/sq.mi

420,000 people

New York:

26,400 people/sq.mi

8,400,000

Manhattan:

70,600 people/sq.mi

1,630,000

2011

Source: US Census

San Jose:

5,800 people/sq.mi

950,000 people

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The Next 2 Million : Changing the Paradigm

2035 Bay Area Growth Distributed only in 3 Bay Area Urban Cores

C_W_H, FAIA/SOM

NORTH BEACH:

59,880 people/sq.mi

San Francisco:

21,000 people/sq.mi

1,000,000 people

(+200,000)

Oakland:

16,900 people/sq.mi

1,000,000 people

(+680,000)

Manhattan:

70,600 people/sq.mi

1,630,000

2035

Source: US Census

San Jose:

12,100 people/sq.mi

2,100,000 people
(+1,150,000)

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The Next 2 Million : Changing the Paradigm

A Start: Three San Francisco Projects

Treasure Island
8,000 units

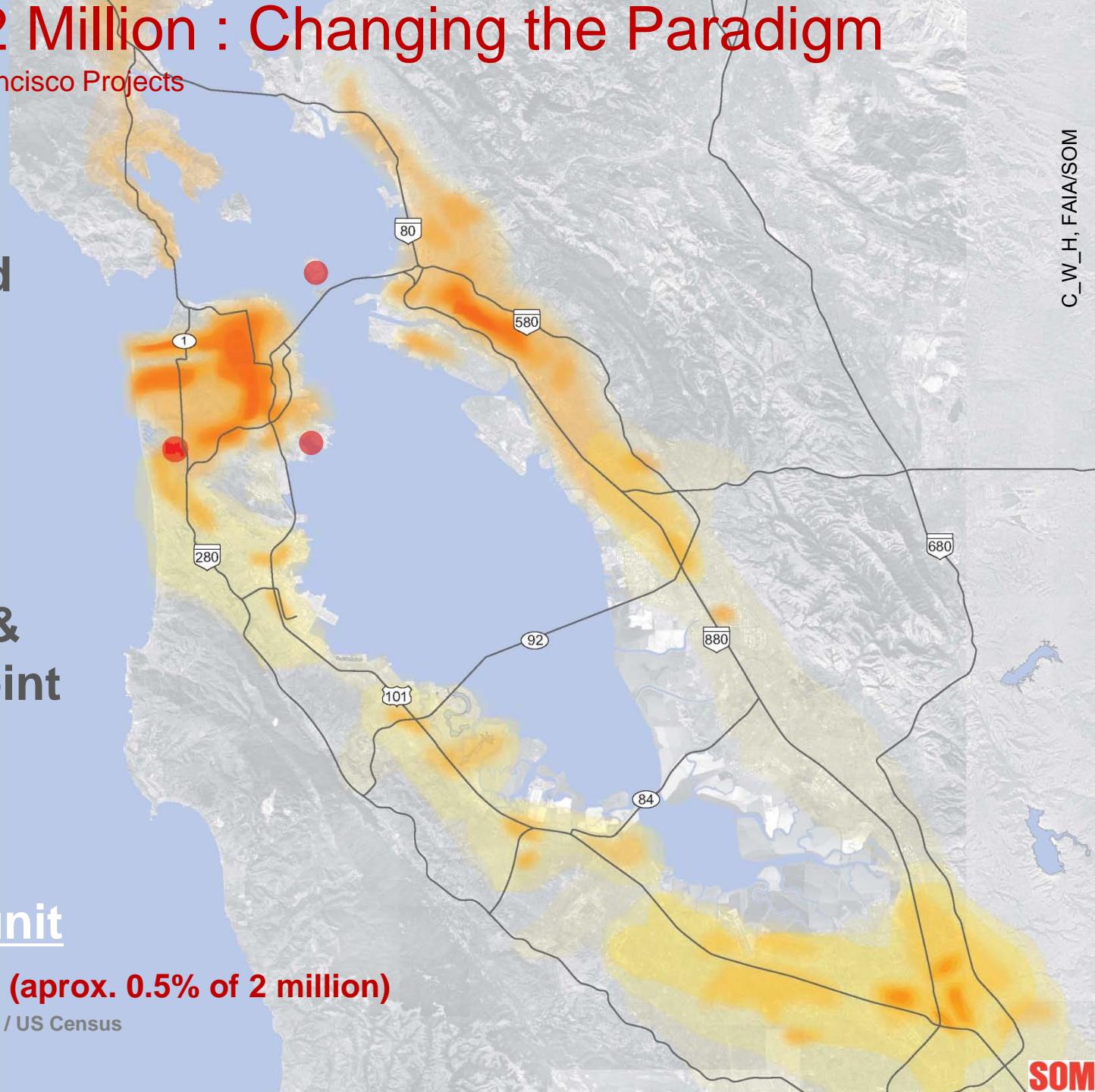
Parkmerced
5,500 units

Hunters Point &
Candlestick Point
10,500 units

Total
24,000 units
X 2.4 people/unit

57,600 people (approx. 0.5% of 2 million)

Source: SF Planning Department / US Census



What would 100,000 people per square mile look like?

Myths and Realities



Crowd

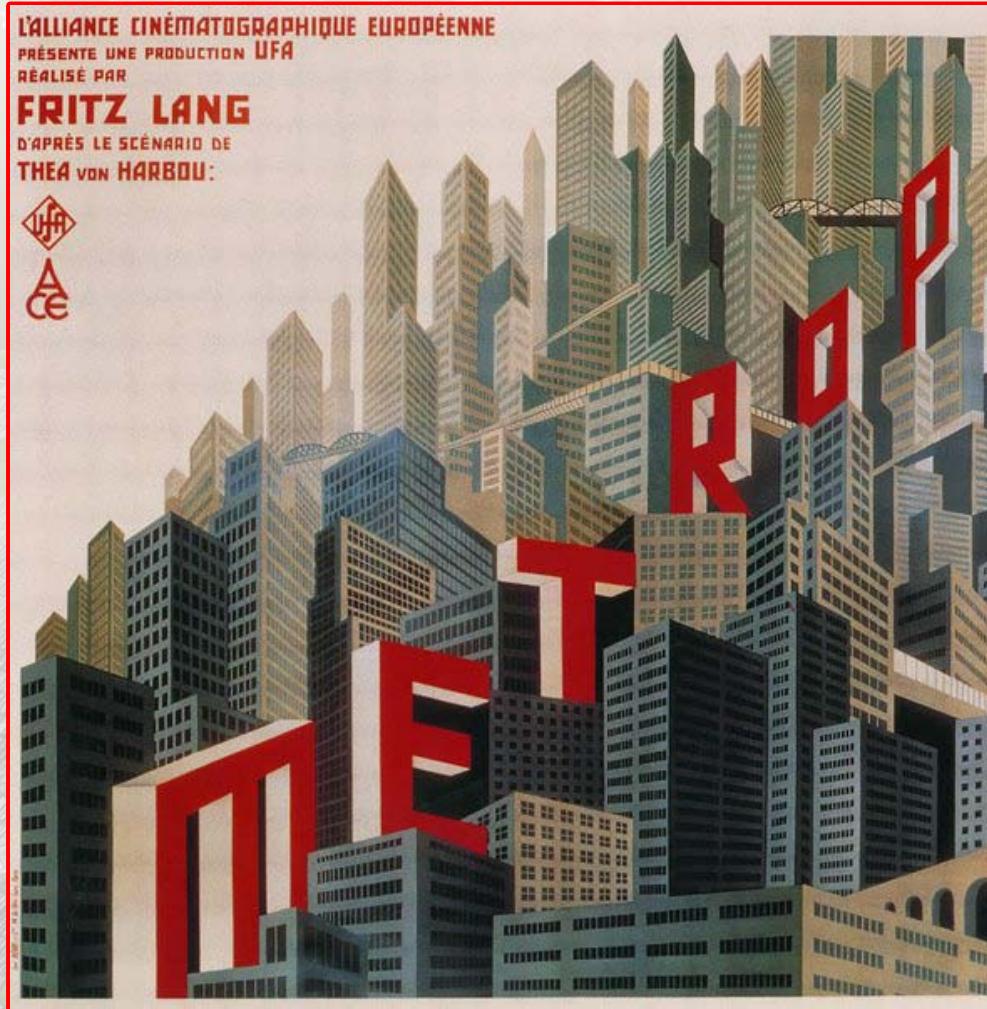
Source: <http://science-cochrane.wikispaces.com/file/view/mco-crowd.jpg/89855271/mco-crowd.jpg>

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What would 100,000 people per square mile look like?

Myths and Realities



Metropolis Movie Poster, 1920s

Source: <https://theinvisibleagent.wordpress.com/tag/forbidden-planet/>

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What would 100,000 people per square mile look like?

Myths and Realities



Metropolis Movie, 1920s

Source: <http://200movies1woman.com/2010/12/24/metropolis/>

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What would 100,000 people per square mile look like?

Myths and Realities



Hugh Ferriss

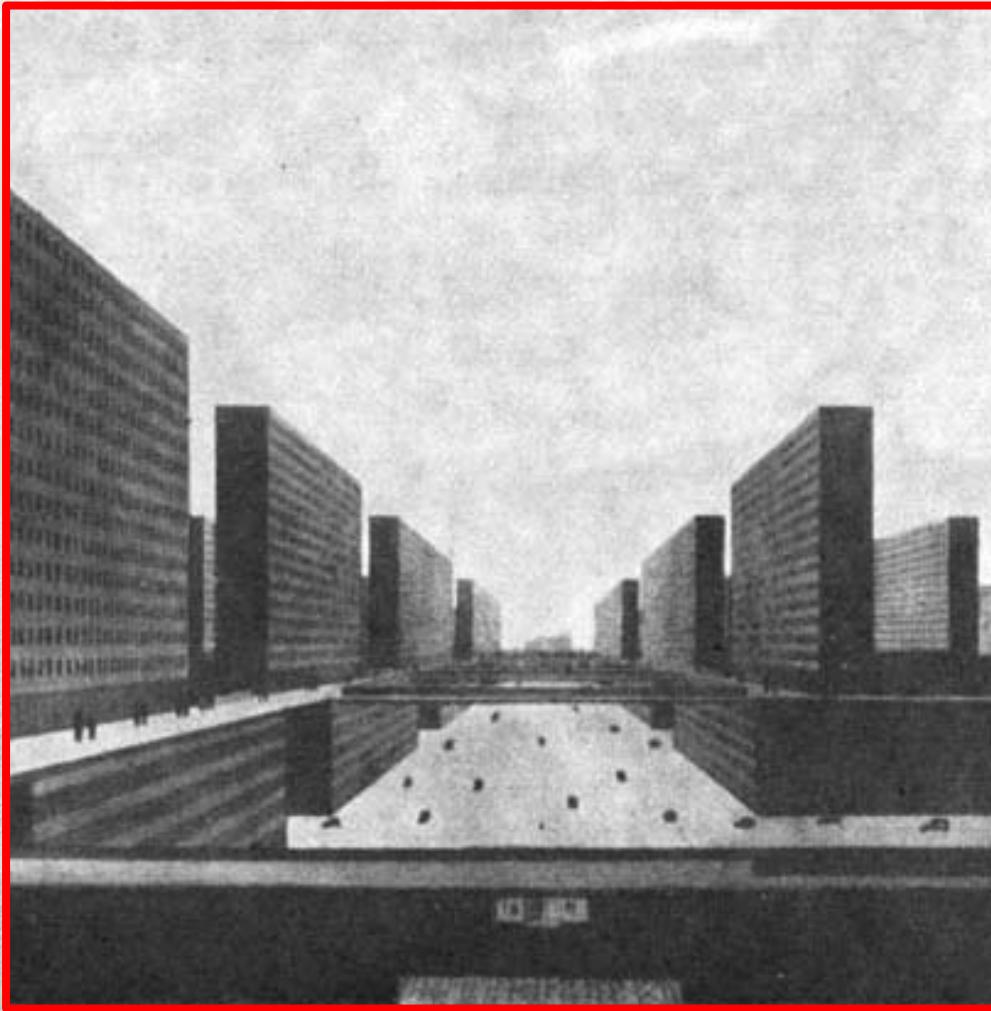
Source: <http://www.nottingham.ac.uk/3cities/large/1039.HTM>

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What would 100,000 people per square mile look like?

Myths and Realities



Hilberseimer

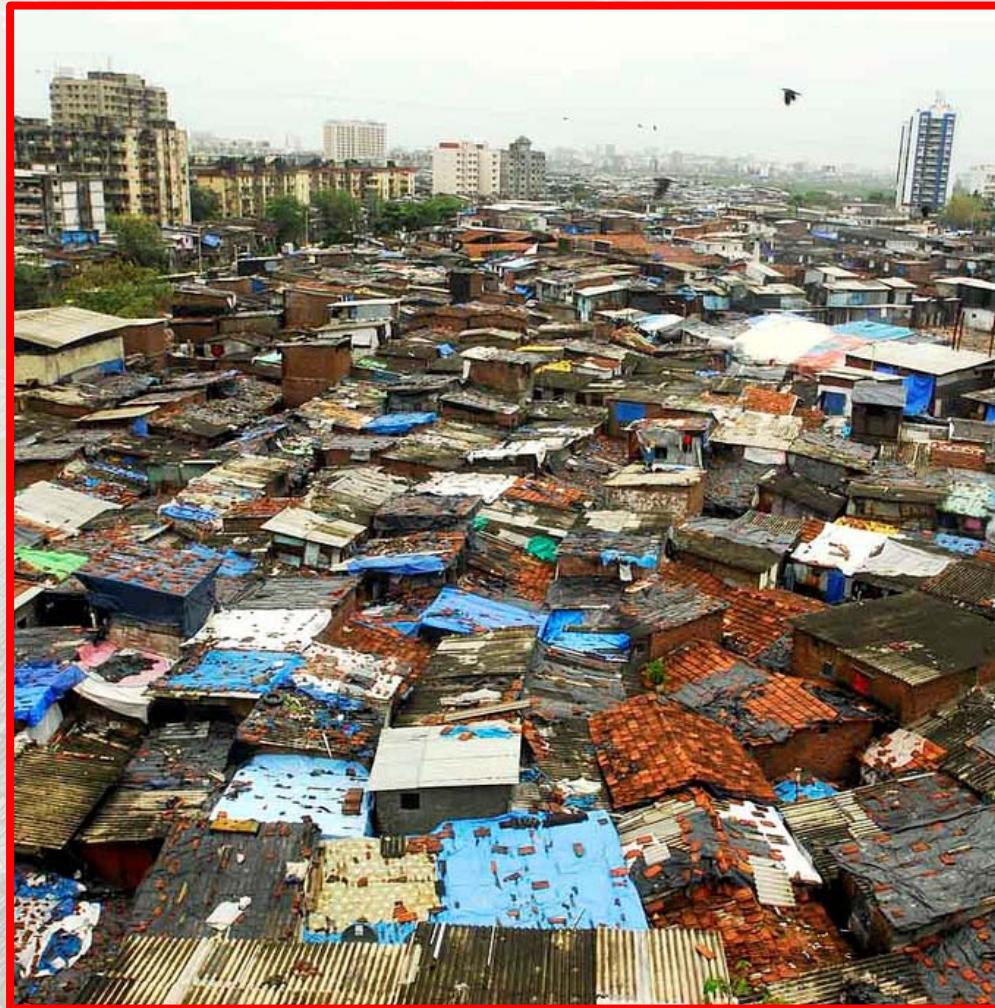
Source: <http://pedshed.net/?p=31>

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What would 100,000 people per square mile look like?

Reality



Mumbai

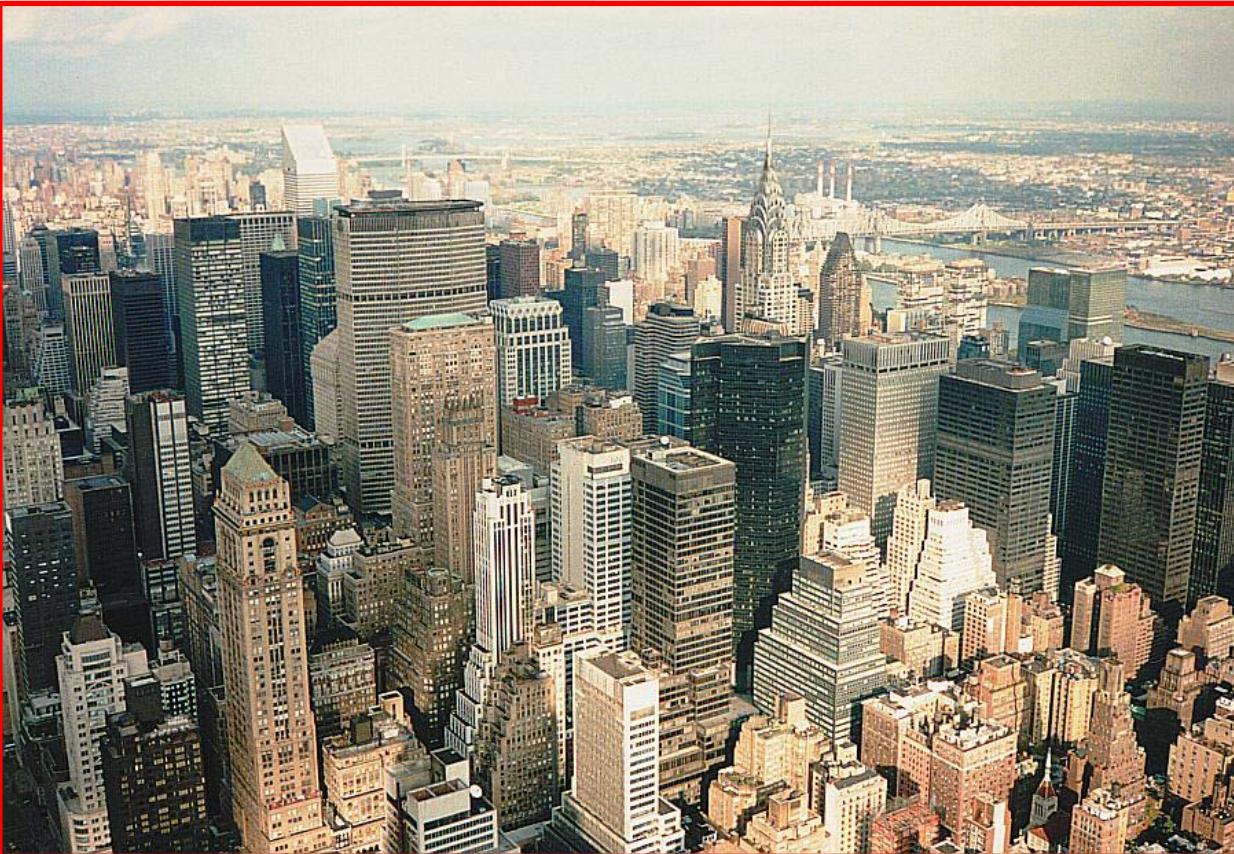
Source: <http://www.asianwindow.com/tag/dharavi/>

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SOM

What would 100,000 people per square mile look like?

Reality



New York

Source: http://www.knowledgerush.com/kr/encyclopedia/New_York,_New_York/

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SOM

What would 100,000 people per square mile look like?

Myth



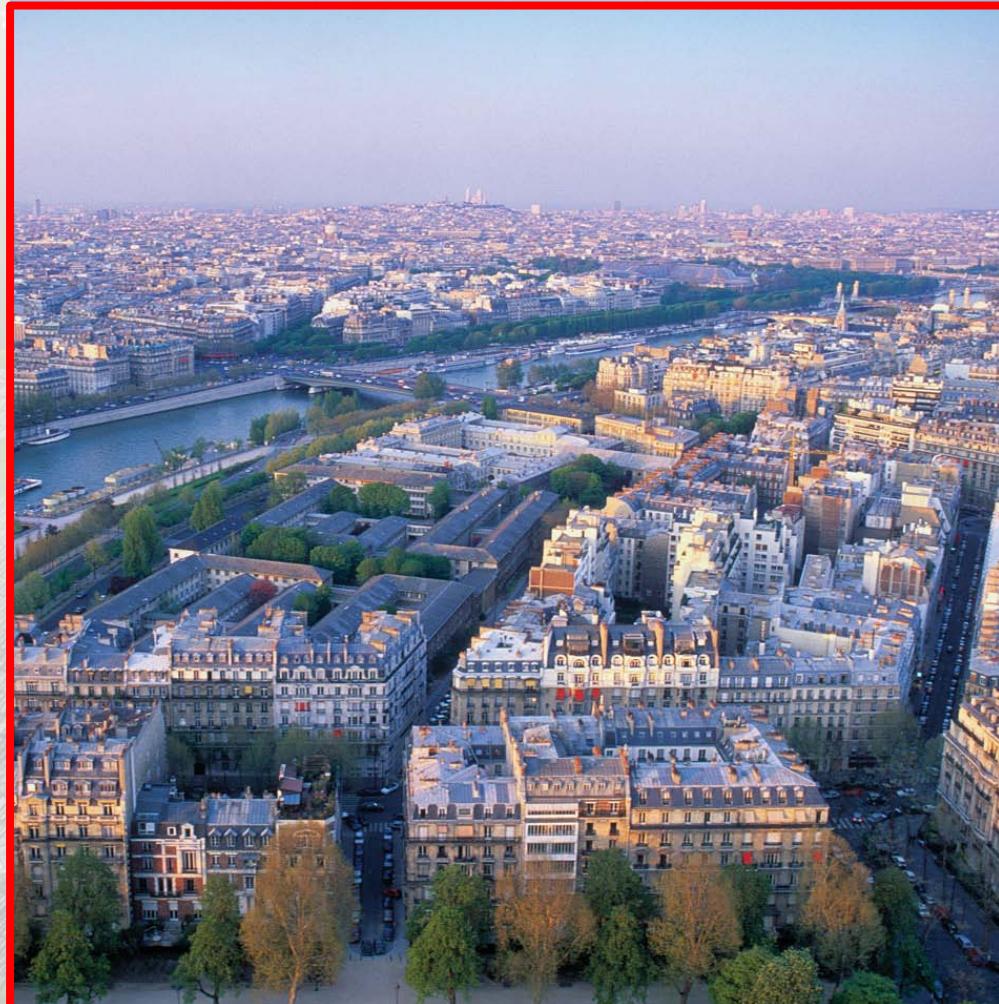
Burj Khalifa

C_W_H, FAIA/SOM

SOM

What would 100,000 people per square mile look like?

Reality

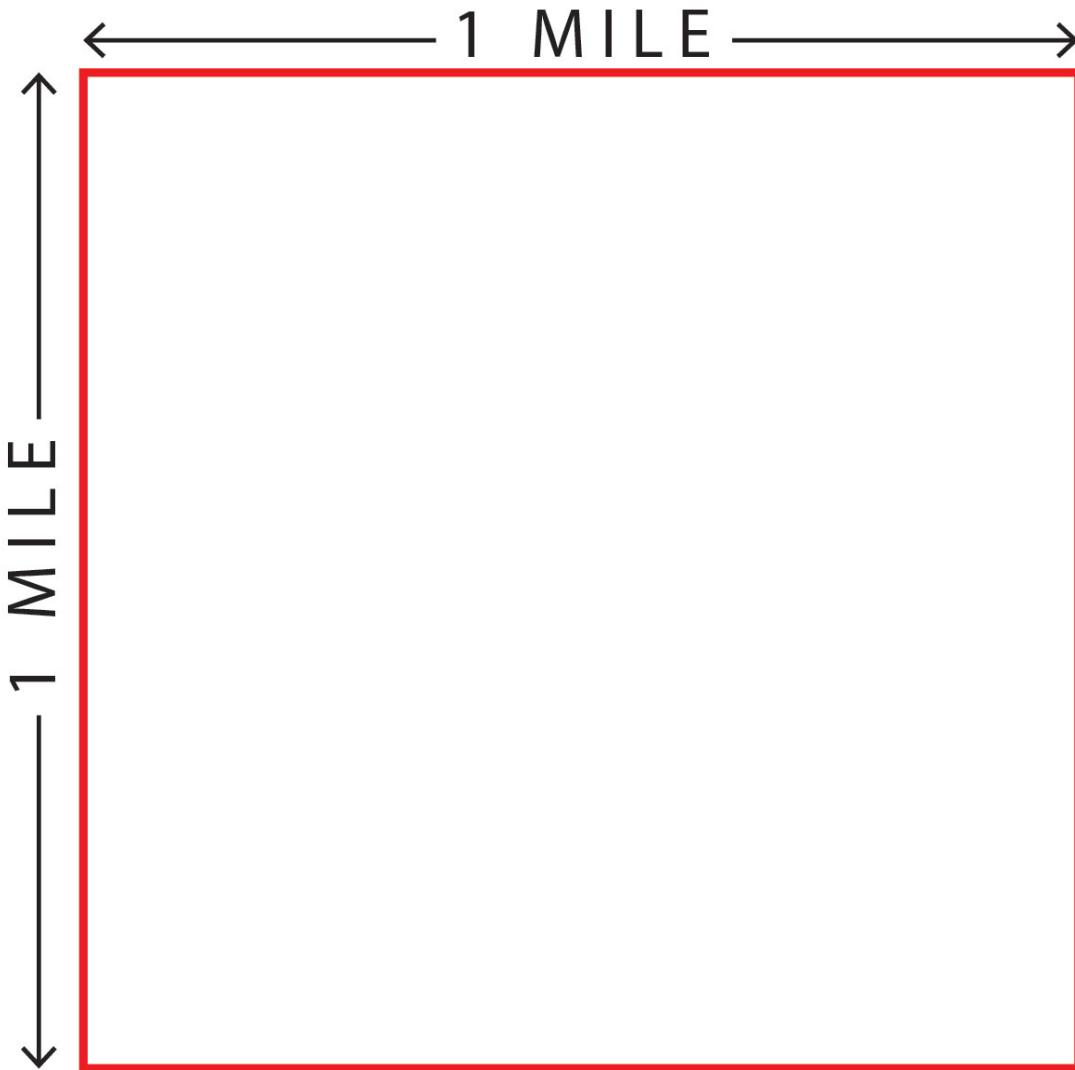


Paris

C_W_H, FAIA/SOM

SOM

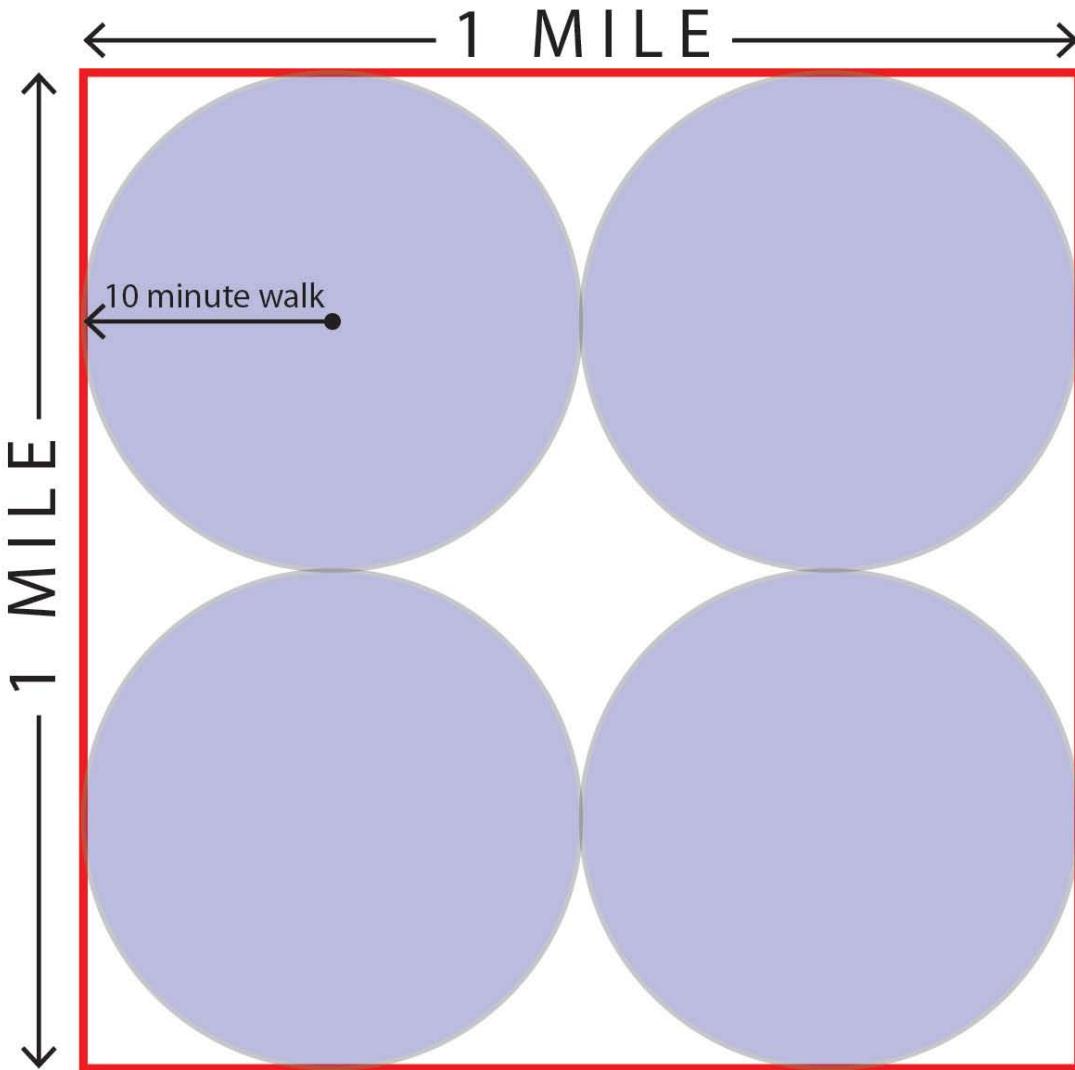
What would 100,000 people per square mile look like?



C_W_H, FAIA/SOM

SOM

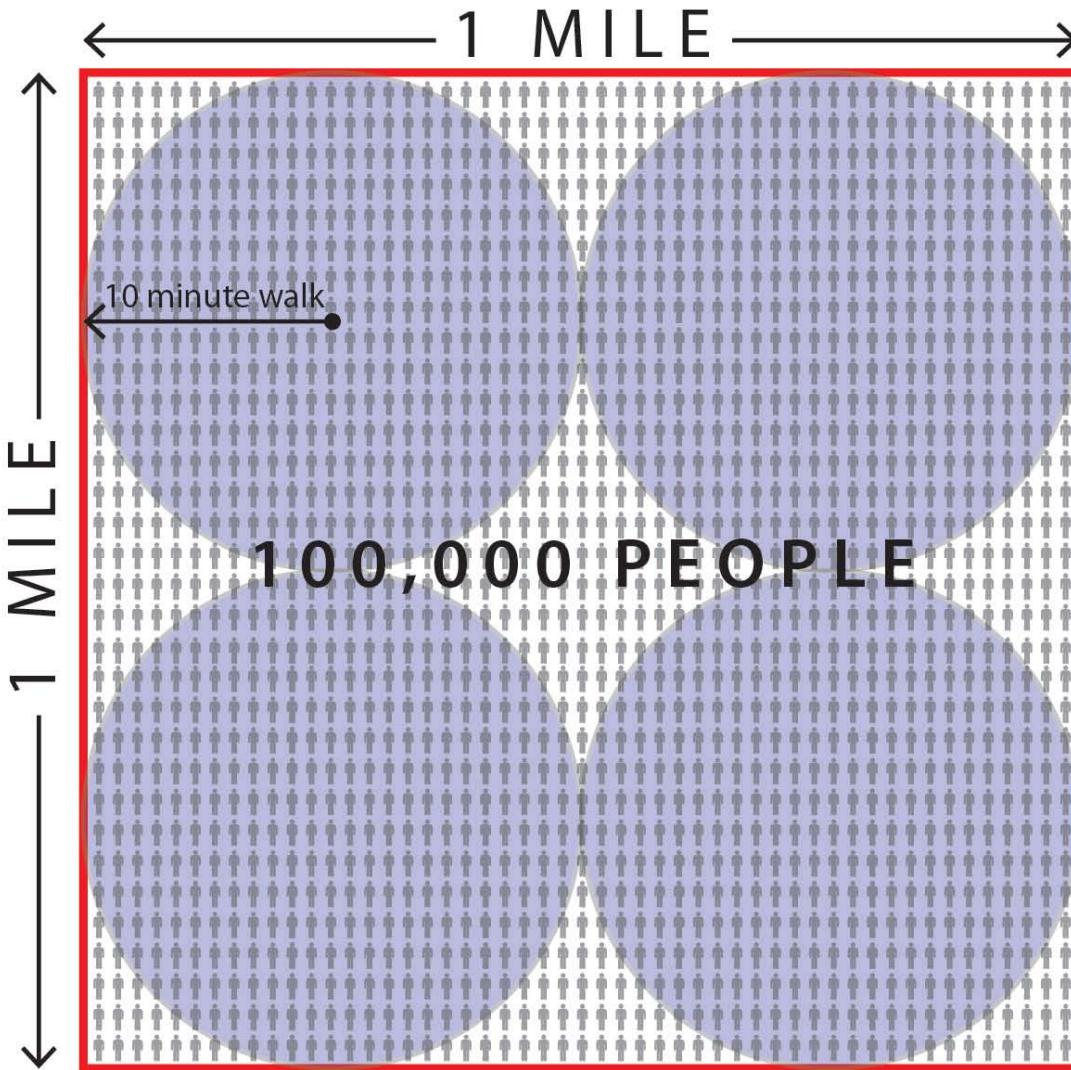
What would 100,000 people per square mile look like?



C_W_H, FAIA/SOM

SOM

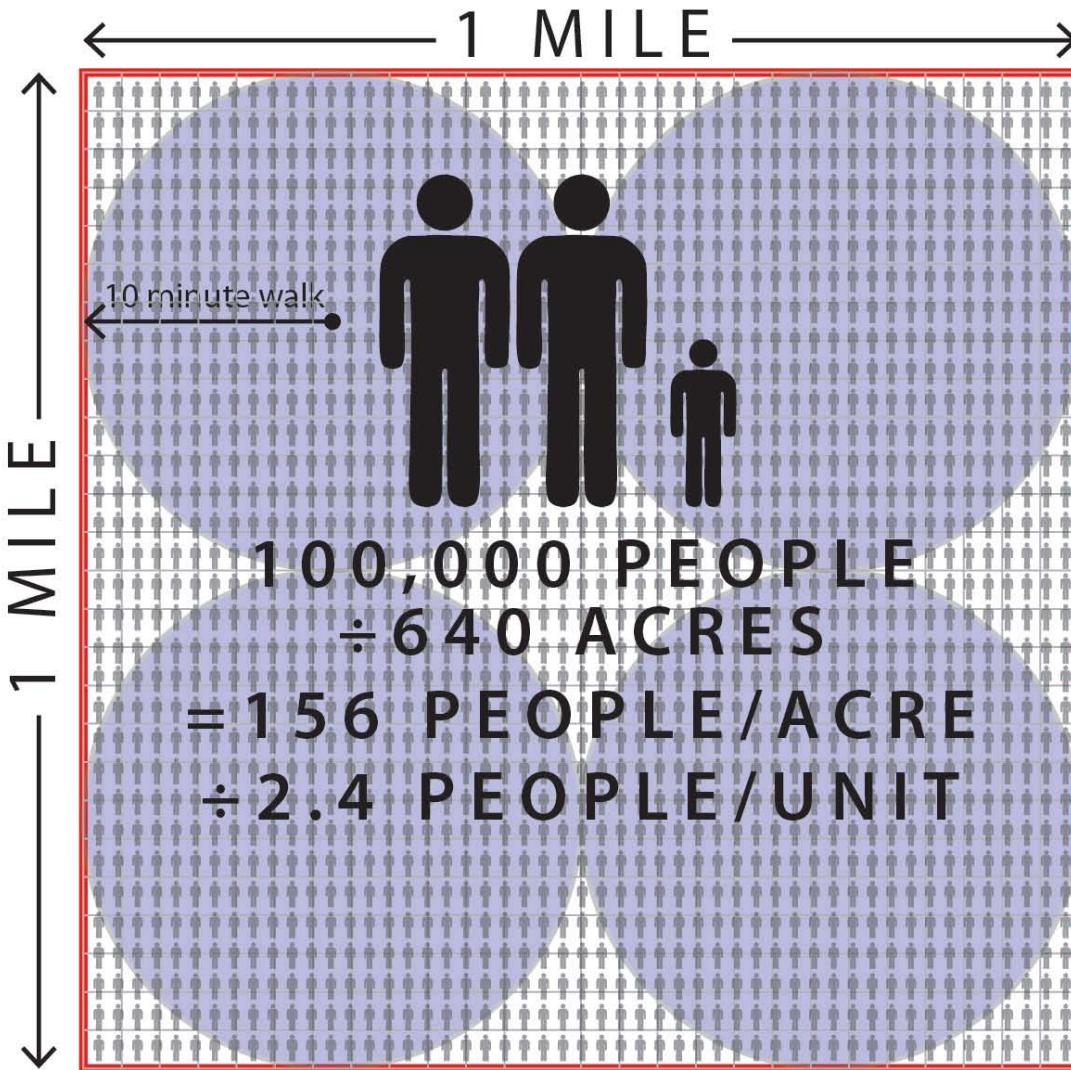
What would 100,000 people per square mile look like?



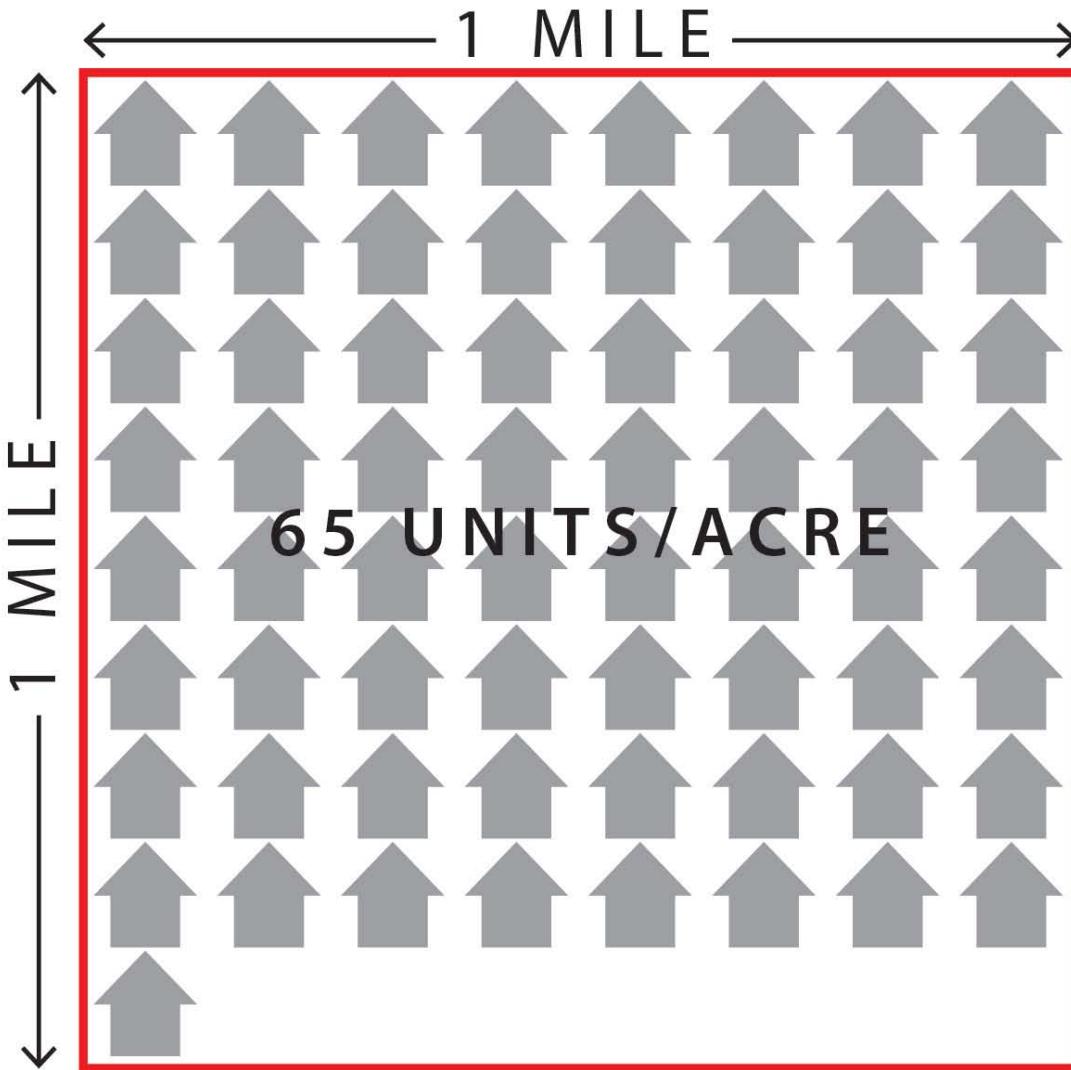
C_W_H, FAIA/SOM

SOM

What would 100,000 people per square mile look like?



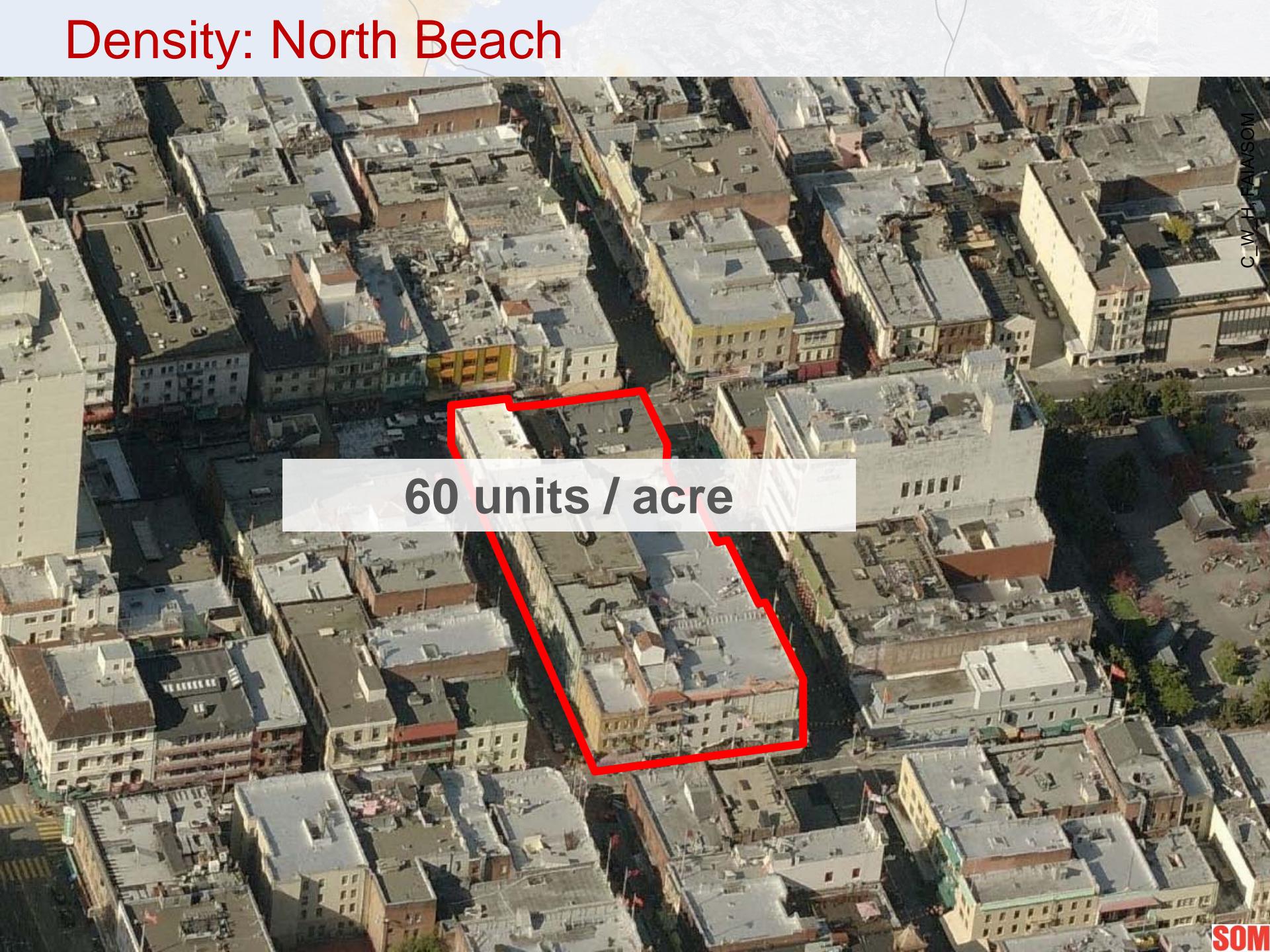
What would 100,000 people per square mile look like?



C_W_H, FAIA/SOM

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Density: North Beach

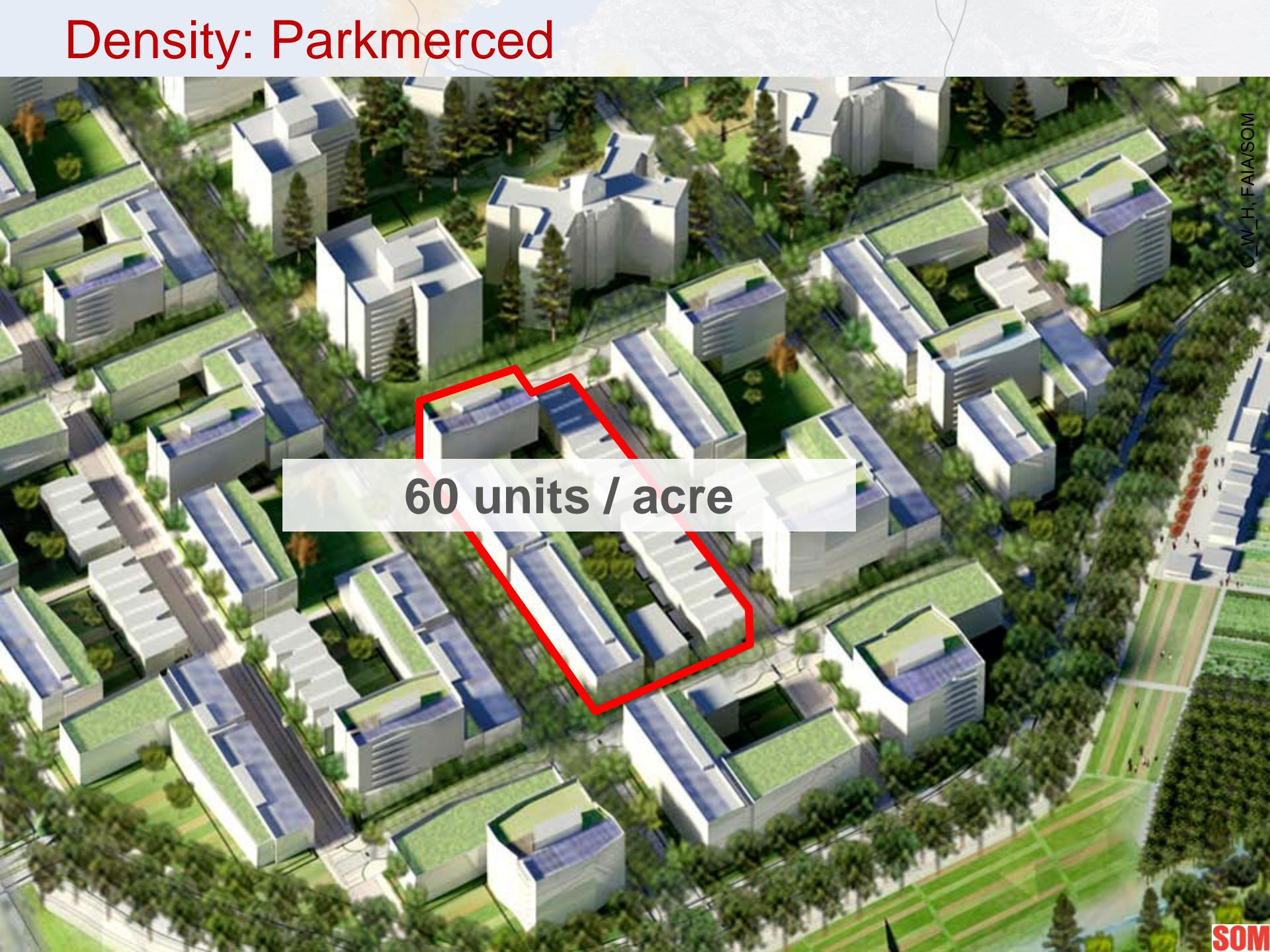


C_WHEALSON

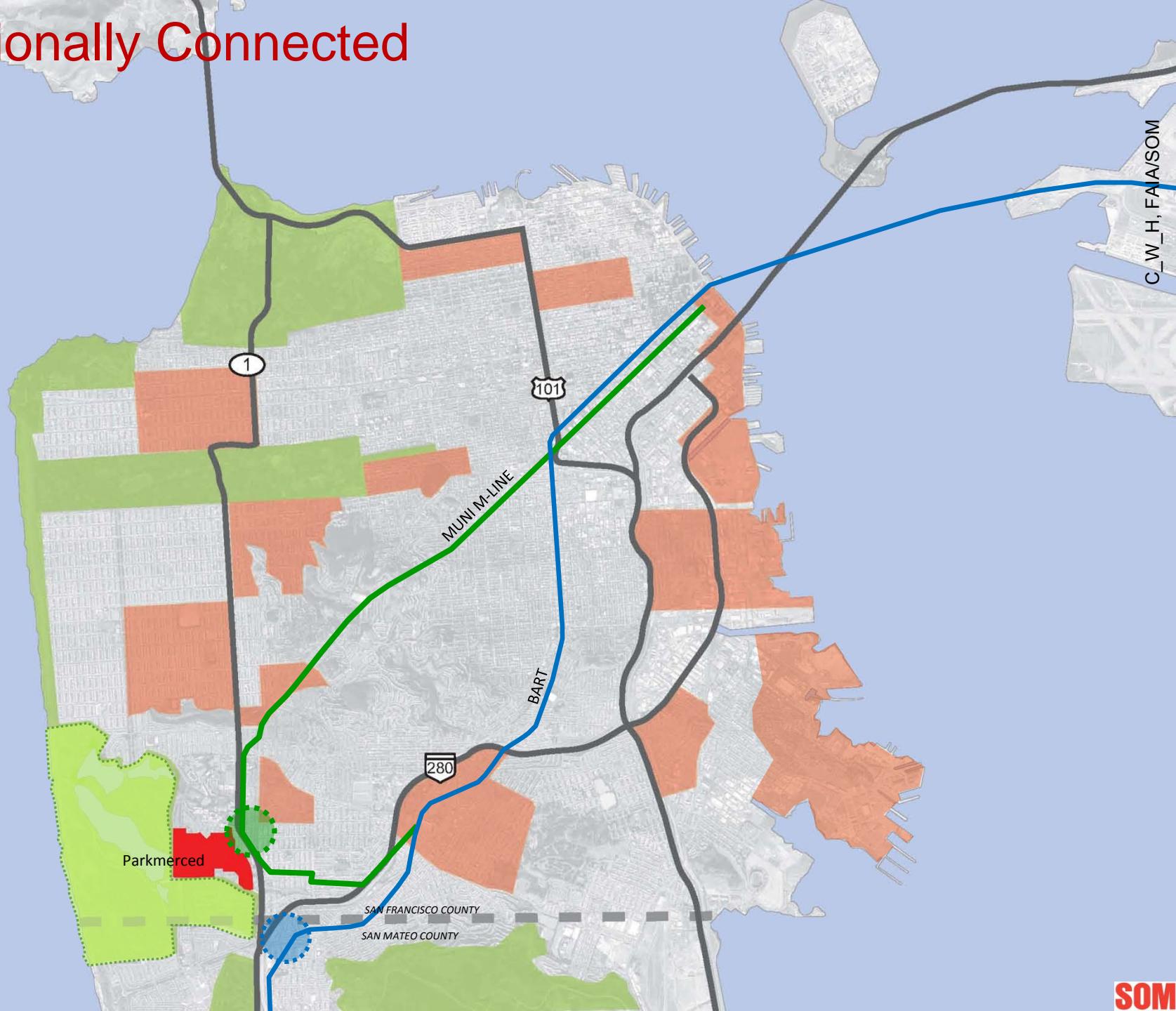
60 units / acre

SOM

Density: Parkmerced



Regionally Connected



Principles

Build an **ENVIRONMENTALLY SUSTAINABLE** community

Increase **HOUSING** rental & for sale

Create **TRANSIT-ORIENTED** neighborhood

Create a **SOCIAL HEART** for the community

Provide a **DIVERSE COMMUNITY**

A Diverse Neighborhood Ecology

- Existing Rent-Controlled Homes to Remain
- New Rent-Controlled Homes
- New Homes (15% inclusionary)

1,683

1,538

5,679

TOTAL DWELLINGS

8,900

- Neighborhood Retail

230,000 sf

- Offices

80,000 sf

- School

25,000 sf

- Community Center

64,000 sf

- Open Space & New Parks

2,964,200 sf

An Engaged Process

- Better Streets Plan
- Transit First Policy
- Transit Effectiveness Plan
- Bicycle Plan
- Inclusionary Housing
- Planning Department Urban Design Goals

Existing Parkmerced: A Suburban Vision



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Adding Density to Improve Livability



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Holistic, Diverse and Integrated Neighborhoods

Shop, Work and Support

Introducing a new variety of uses into Parkmerced increases the livability of the neighborhood, as well as reduces the impacts residents currently have on local and global ecological systems.

Social Heart

Retail on the ground floor with professional offices above, the Parkmerced social heart will include a neighborhood serving market and other retail, making it convenient for Parkmerced neighbors to walk or ride a bike for daily errands.



Neighborhood Commons

Evenly distributed throughout Parkmerced, neighborhood commons will be social gathering places anchored by small retail shops, business centers for work at home, outdoor activities, bike and car share pods, etc.

Education + Well-Being

To increase the social vibrancy and importance of the social heart, the school site is centrally located and accessible to all Parkmerced residents. Living well and being well are critical not only to sustain life, but for life to thrive. A Community and Fitness Center will provide opportunities for recreation and social interaction.

	MIXED USE SOCIAL HEART
	MIXED USE NEIGHBORHOOD COMMONS
	ORGANIC FARM / RESTAURANT
	SCHOOL / DAY CARE
	COMMUNITY / FITNESS CENTER

Land Use

Connecting MUNI and the Neighborhood

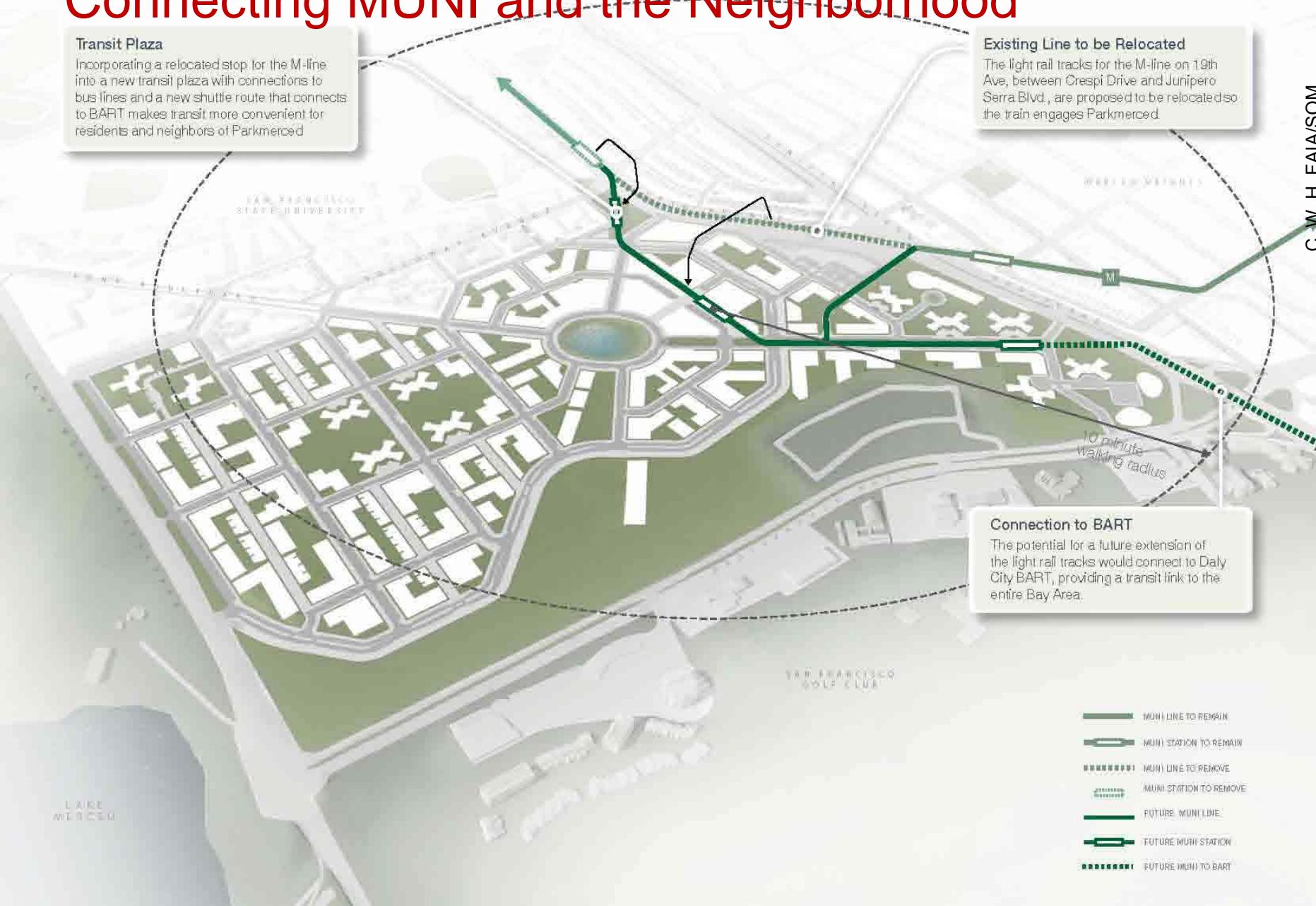
Transit Plaza

Incorporating a relocated stop for the M-line into a new transit plaza with connections to bus lines and a new shuttle route that connects to BART makes transit more convenient for residents and neighbors of Parkmerced.

Existing Line to be Relocated

The light rail tracks for the M-line on 19th Ave, between Crespi Drive and Junípero Serra Blvd., are proposed to be relocated so the train engages Parkmerced.

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Connection to BART

The potential for a future extension of the light rail tracks would connect to Daly City BART, providing a transit link to the entire Bay Area.

- MUNI LINE TO REMAIN
- MUNI STATION TO REMAIN
- MUNI LINE TO REMOVE
- MUNI STATION TO REMOVE
- FUTURE MUNI LINE
- FUTURE MUNI STATION
- FUTURE MUNI TO BART

Light Rail

An integrated Green Ecology

Hedgerows + Bio-Swales

North-South Streets act as small linear 'greenways' directing both water and people towards the large open spaces at the southern edge of the neighborhood.

Green Connector

Connecting the eastern and western edges Parkmerced Gonzalez Drive weaves through the neighborhood creating a robust green link for people, water and habitat from SFSU to Lake Merced.

Community Gardens

A place for residents to get their hands in the dirt, the Community Gardens offer a setting for those who enjoy the experience of cooking and eating food that they have grown themselves.

MERCEDES DRIVE

Recreation and Active Play

Sports fields offer residents of Parkmerced the opportunity to participate in active recreation.

Neighborhood Gathering

Places for residents of Parkmerced to gather, the Neighborhood Commons are active open spaces dedicated to social engagement and recreation.

Organic Farm + Stream Corridor

At the seam between human and ecological systems rests organic farming and habitat restoration. Gently sloping away from the neighborhood social heart, towards Lake Merced, will be a site for a professional, local organic farm. Directly adjacent is the stream corridor with native and acclimated plants and wildlife.

- ORGANIC FARM
- FOREST
- NEIGHBORHOOD PARKS
- PRIVATE OPEN SPACE / COURTYARDS
- STREAM CORRIDOR
- COMMUNITY GARDENS
- HEDGEROW TREES

Open Space

An integrated Water Ecology

Bio-Swales + Bio-Gutters

Replacing typical gutters and storm drains, a network of bioswales and biogutters makes rainwater an integral and visible part of the streetscape.

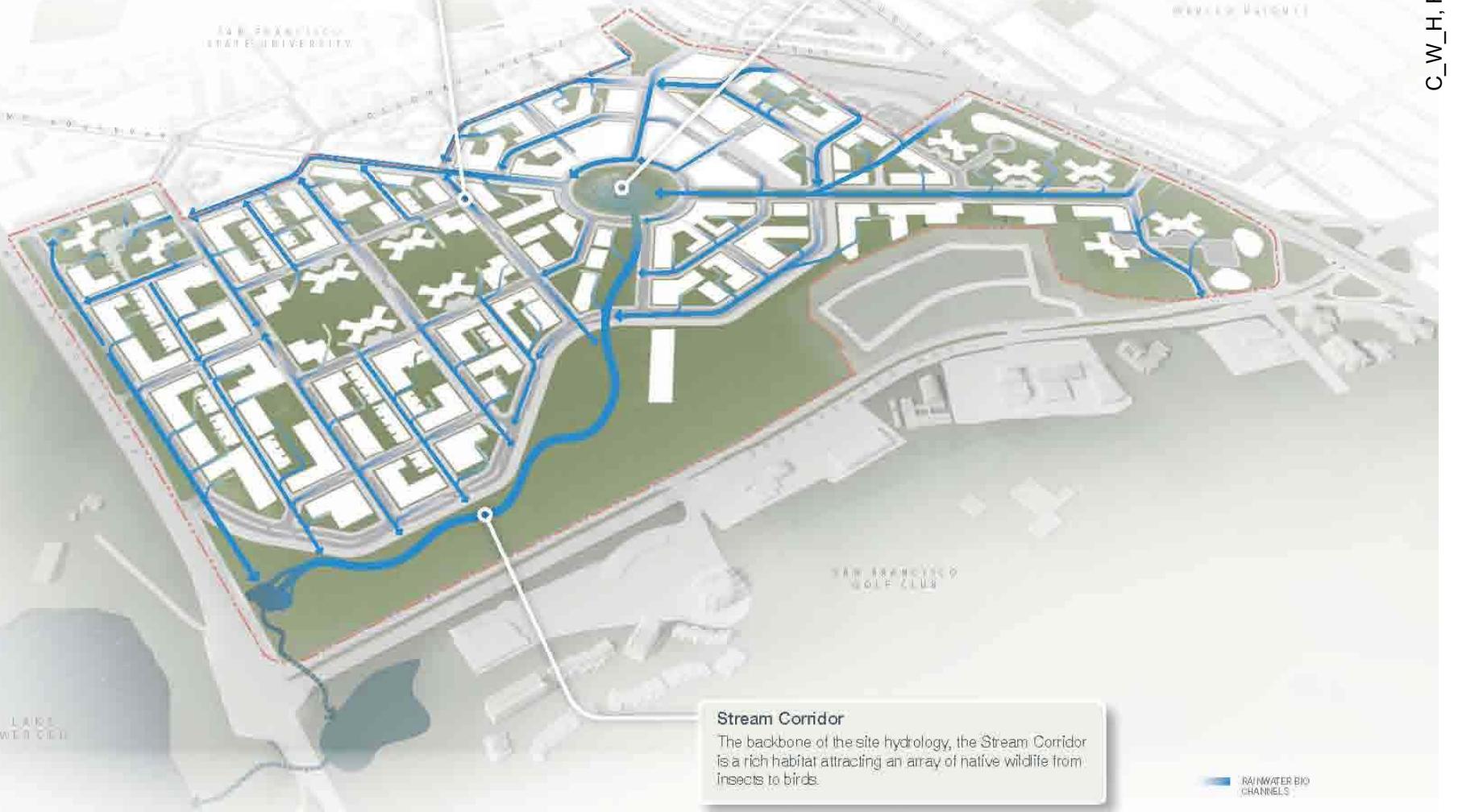
Cistern

Located under Juan Bautista Circle, a cistern collects and stores rainwater to provide sufficient supply for year-round irrigation.

SAN FRANCISCO STATE UNIVERSITY

PARKMERCED

0' 100'



Stream Corridor

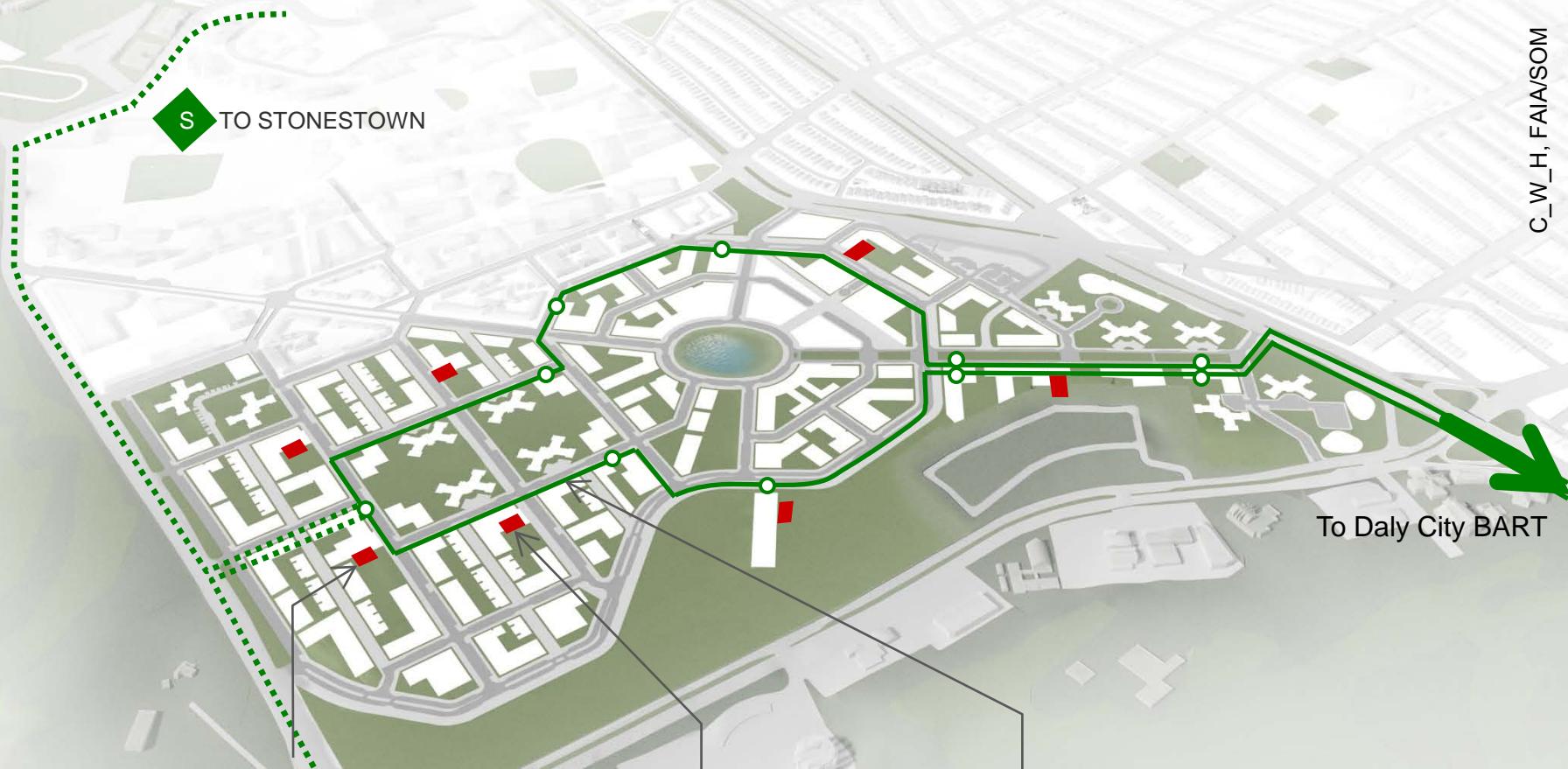
The backbone of the site hydrology, the Stream Corridor is a rich habitat attracting an array of native wildlife from insects to birds.

RAINWATER BIO CHANNELS

Site Hydrology

Integrated Transportation and Ubiquitous Computing

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Transportation Coordinator



Bike Share & Bike Paths



S

Car Share



Shuttle Service



Parking Strategy



SOM



C_W_H_FAI/SOM



C_W_H_FAIA/SOM



C_W_H, FAIA/SOM

C.W.H. FAIA/SOM

This architectural rendering depicts a vibrant urban park scene. In the foreground, a woman sits in a wicker chair on a grassy area, reading a book. Next to her, a man in a wheelchair is being assisted by another person. To the right, two young girls are sitting on the grass, playing with a small object. A paved path leads through the park, lined with lush greenery and colorful flowers. In the background, there are several modern buildings, including a prominent white apartment complex with multiple balconies and a large brown residential building. People are seen walking, sitting, and playing in the park, creating a sense of a lively community space.

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A vibrant architectural rendering of a modern urban plaza. The scene is framed by large, mature trees with dense green foliage on the left and right sides. A wide, light-colored wooden boardwalk runs diagonally from the bottom left towards the center. On the left, a building with a white facade and large windows features a small seating area with red flowers. In the center, several people are walking or sitting on the boardwalk; one couple is in the foreground, another is walking away, and others are sitting on the right. To the right, a modern building with a white facade and large glass windows has a person sitting on a ledge. In the background, there are more buildings, including a prominent yellow-green residential tower. The sky is clear and blue.

C_W_H, FAIA/SOM



Environmental Metrics

C_W_H, FAIA/SOM

Auto Trips

50% REDUCTION

**Green House
Gas Emissions**

60% REDUCTION

Energy

60% REDUCTION – Net Zero

Water

60% REDUCTION – Net Zero

Jobs

1,500 Permanent Jobs
35,000 Construction Jobs

21st Century Density: Vertical Mixed-Use Diversity



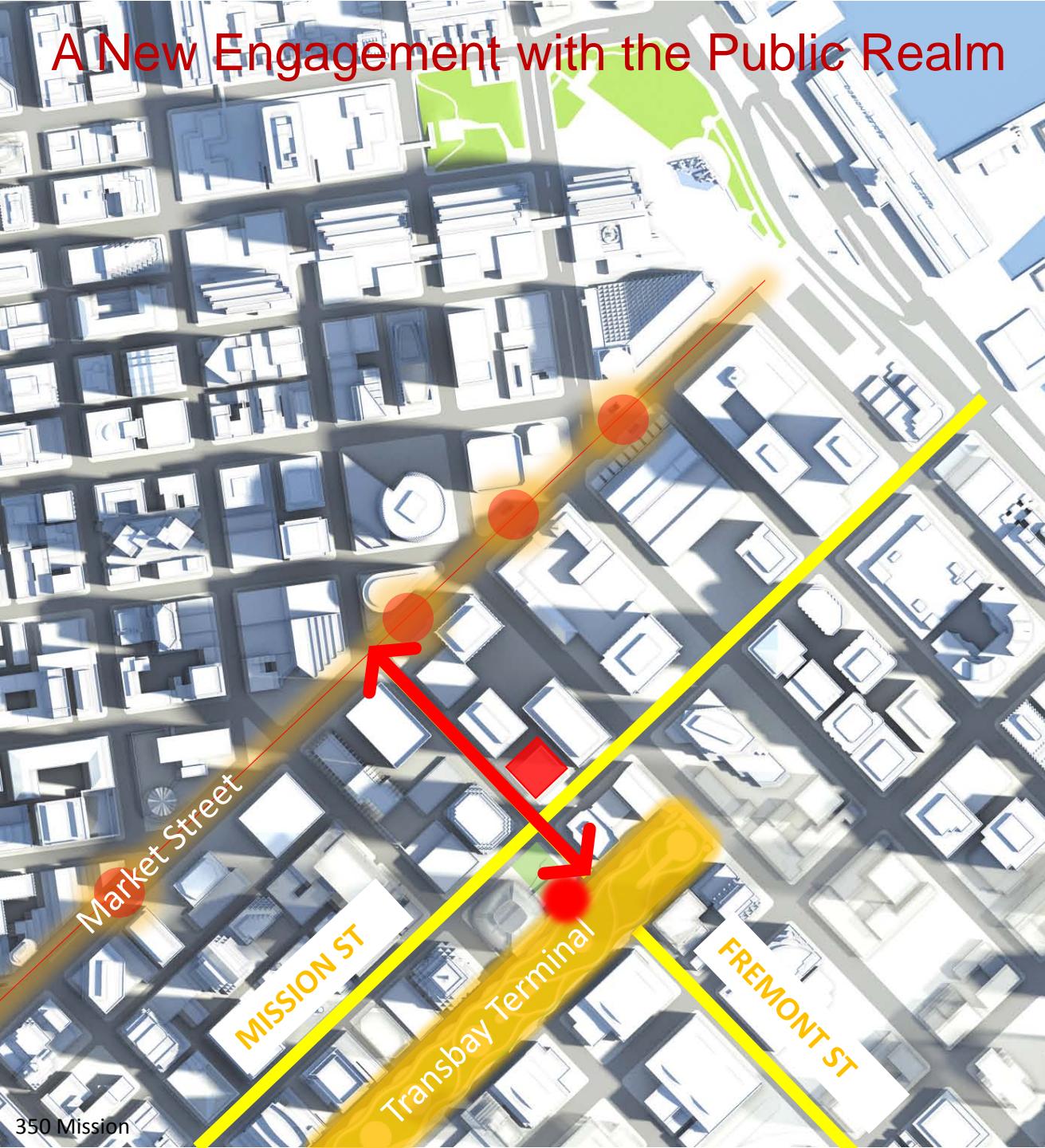
C_W_H_FAA/SOM

21st Century Density: Vertical Mixed-Use Diversity

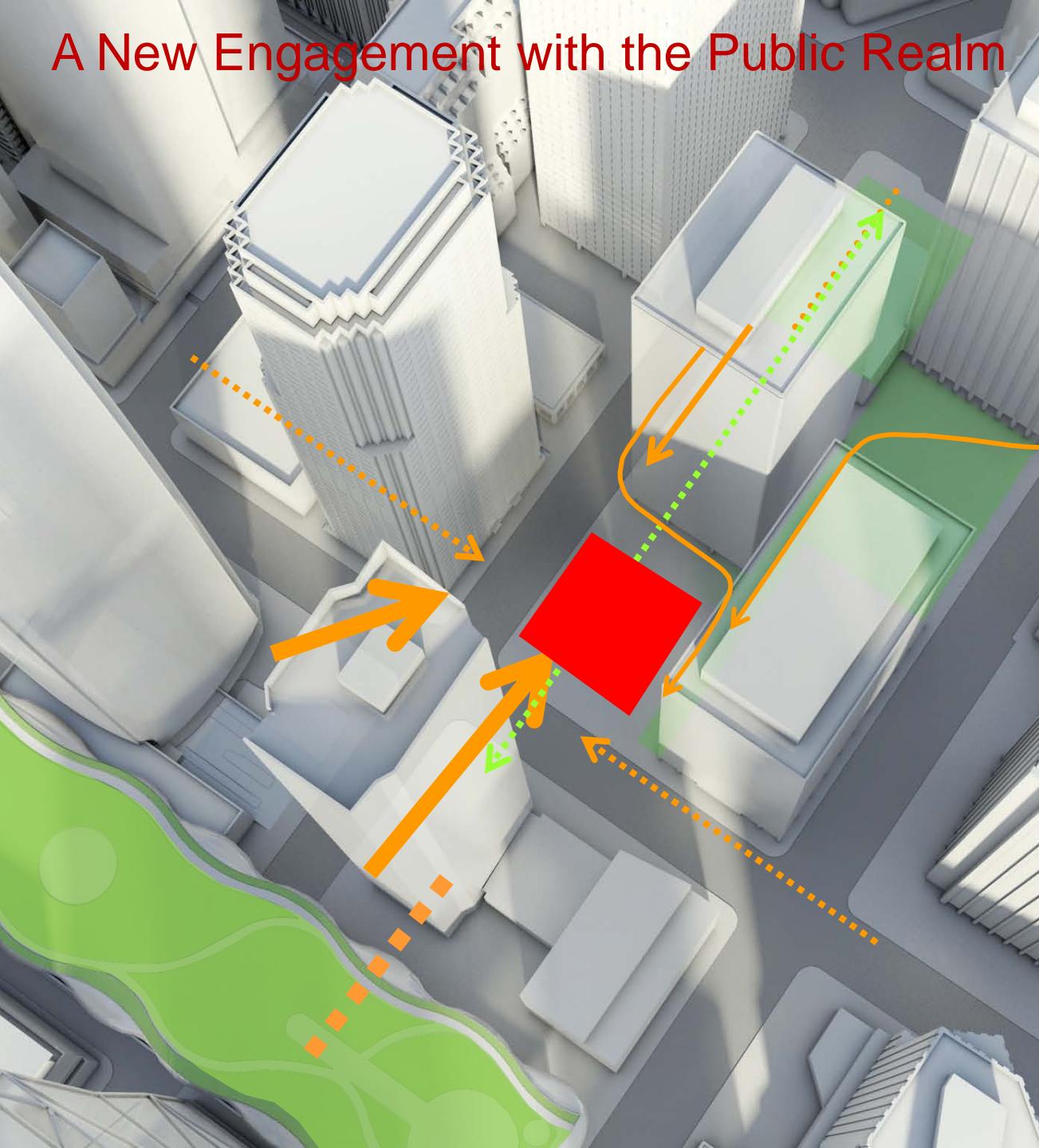


C_W_H, FAIA/SOM

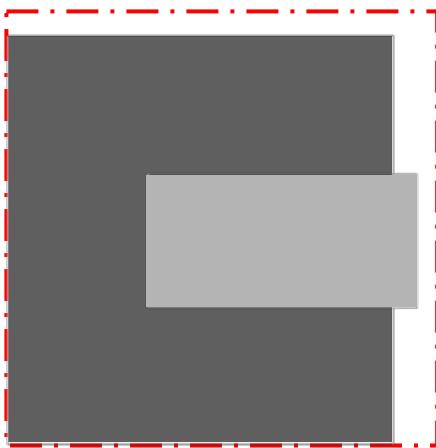
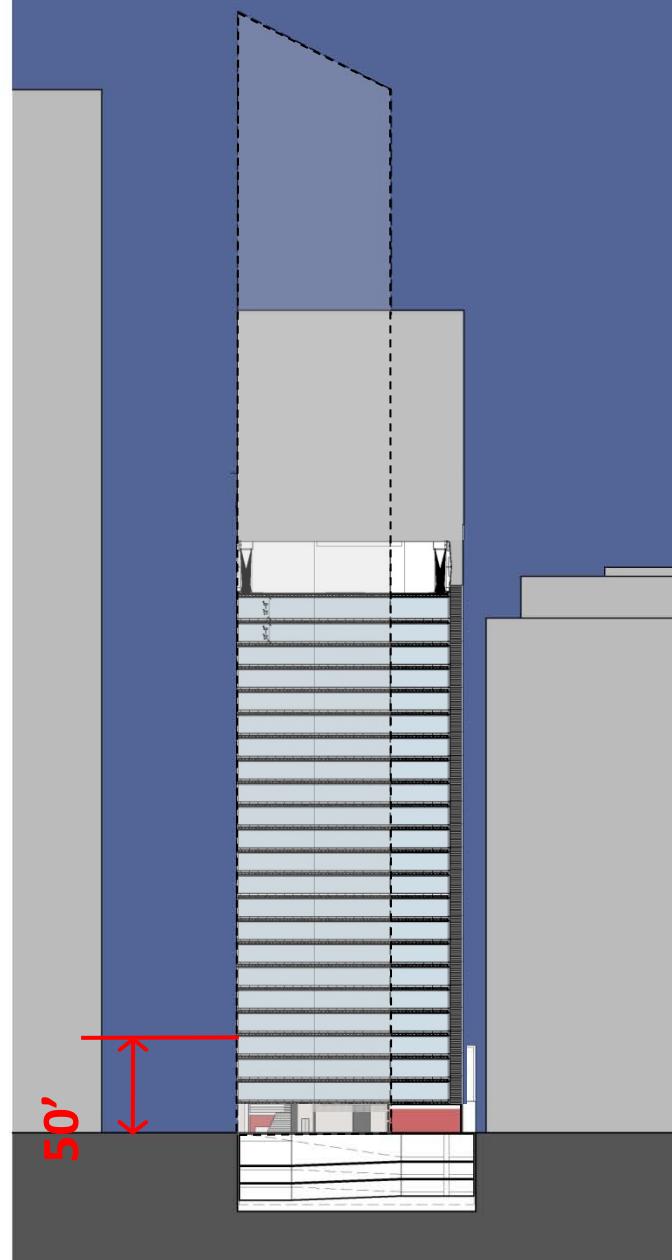
A New Engagement with the Public Realm

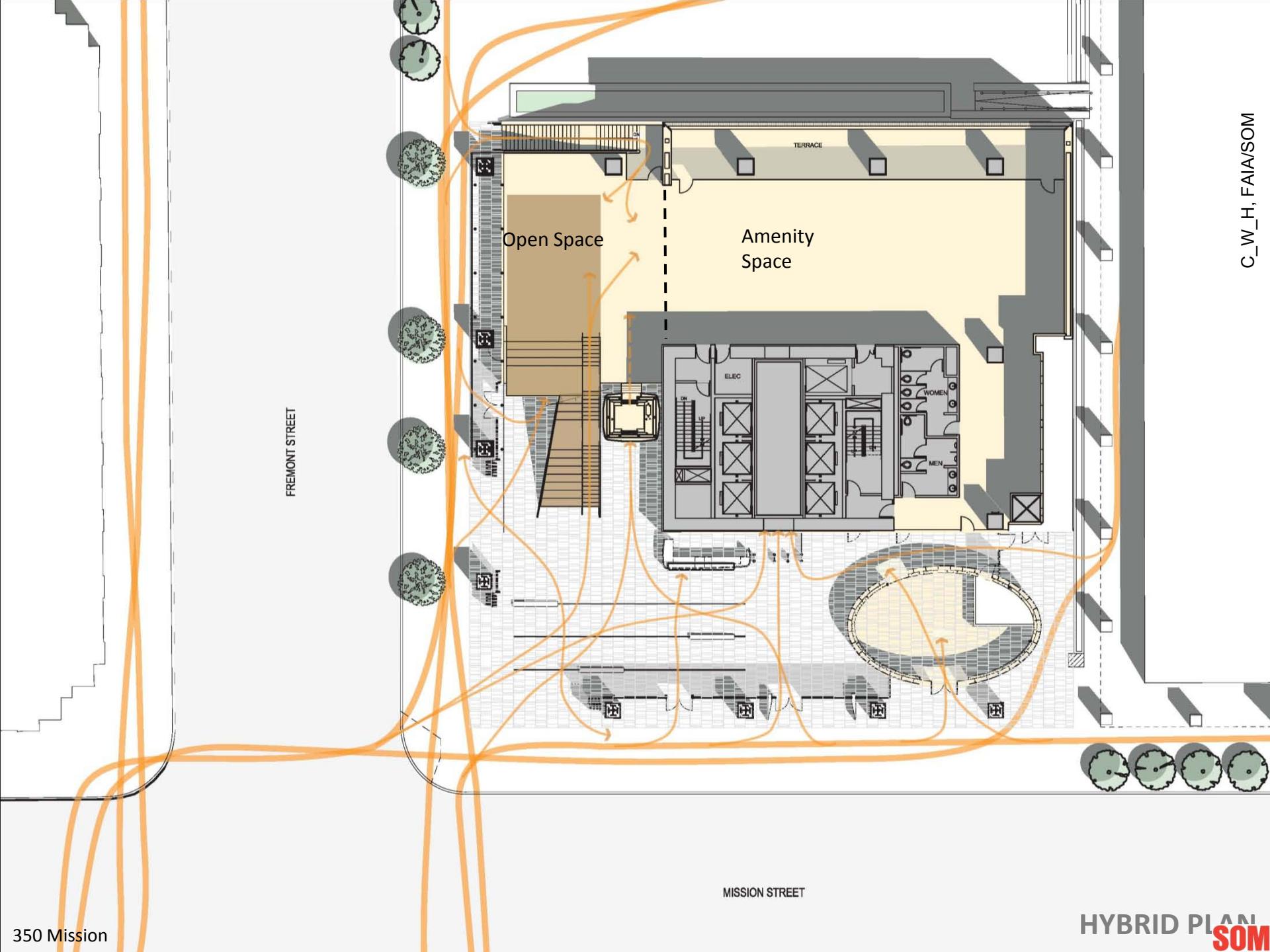


A New Engagement with the Public Realm



SECTION







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Information Categories

Resources/Usage



Energy Consumption
Heating/Cooling
Power

Water Consumption

Air Quality
Sound/Noise

Building



Construction Materials
Technological Innovations
Carbon Footprint

Occupancy

Neighborhood



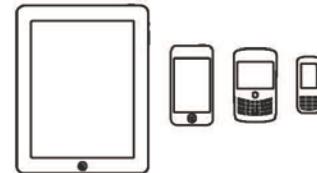
Transportation
Bart/Muni
Traffic
Cycling

Cultural
Museums
Galleries
Theater

Restaurants/Eateries



iPad/Smart Phone(s)



iPads with a unique app are strewn about the space, on the various seating areas or perhaps as a central iPad docking station. Passerbys with smart phones are invited to explore and learn about 350 Mission as well.

The app's content is granular and informative, the large media reflects this information but in an abstract/creative way.



SKY BRIGHTNESS

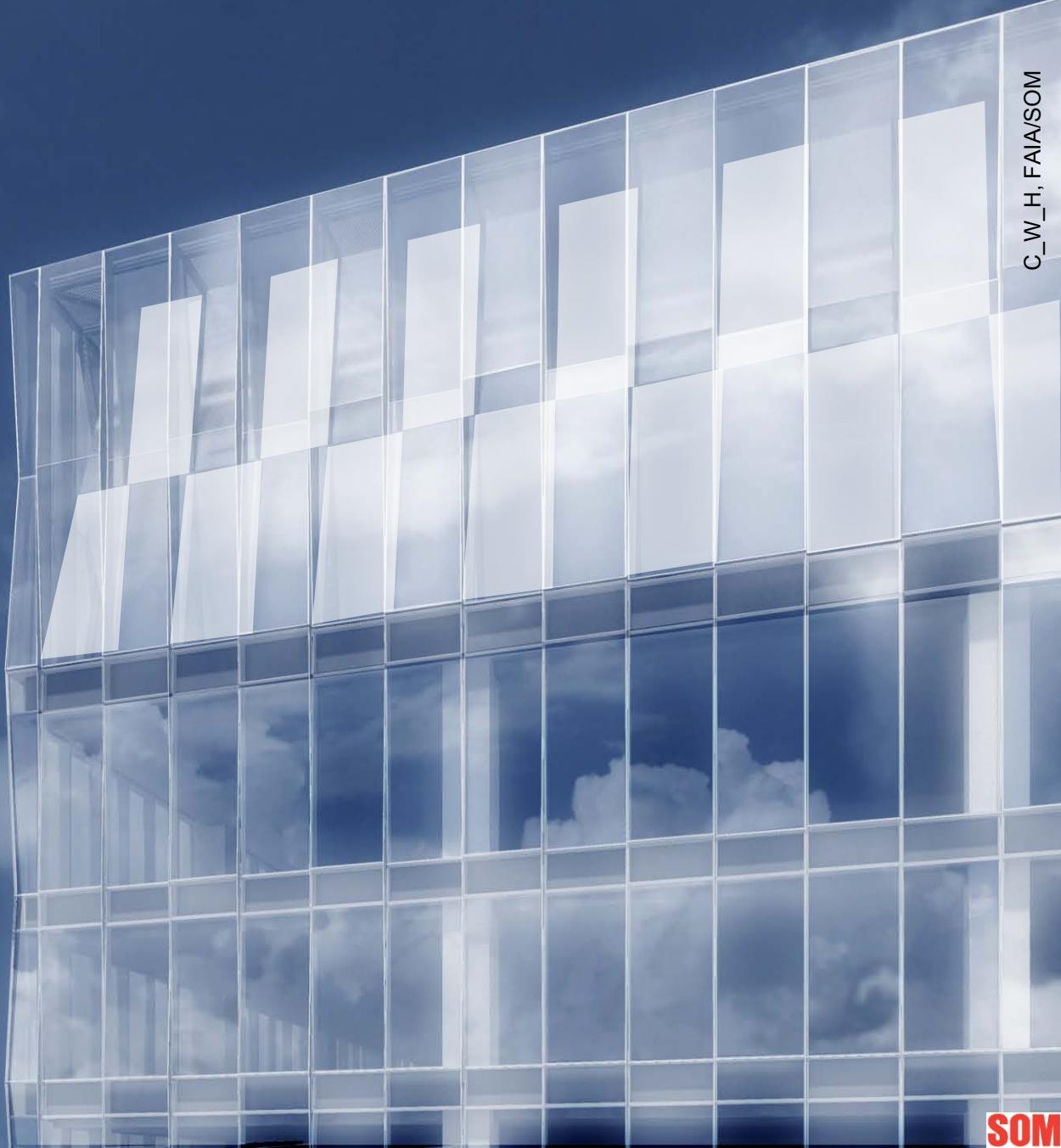
REFLECTED LIGHT

350 Mission



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SOM



C_W_H, FAIA/SOM



Density × Uniformity + Monotony = DEATH

Source: Paul Jamgaard



Density x Diversity + Intensity = Vitality

Source: Paul Jamtgaard

