



Freeway Rethink

Burying Hospital Curve and Removing the Central Freeway

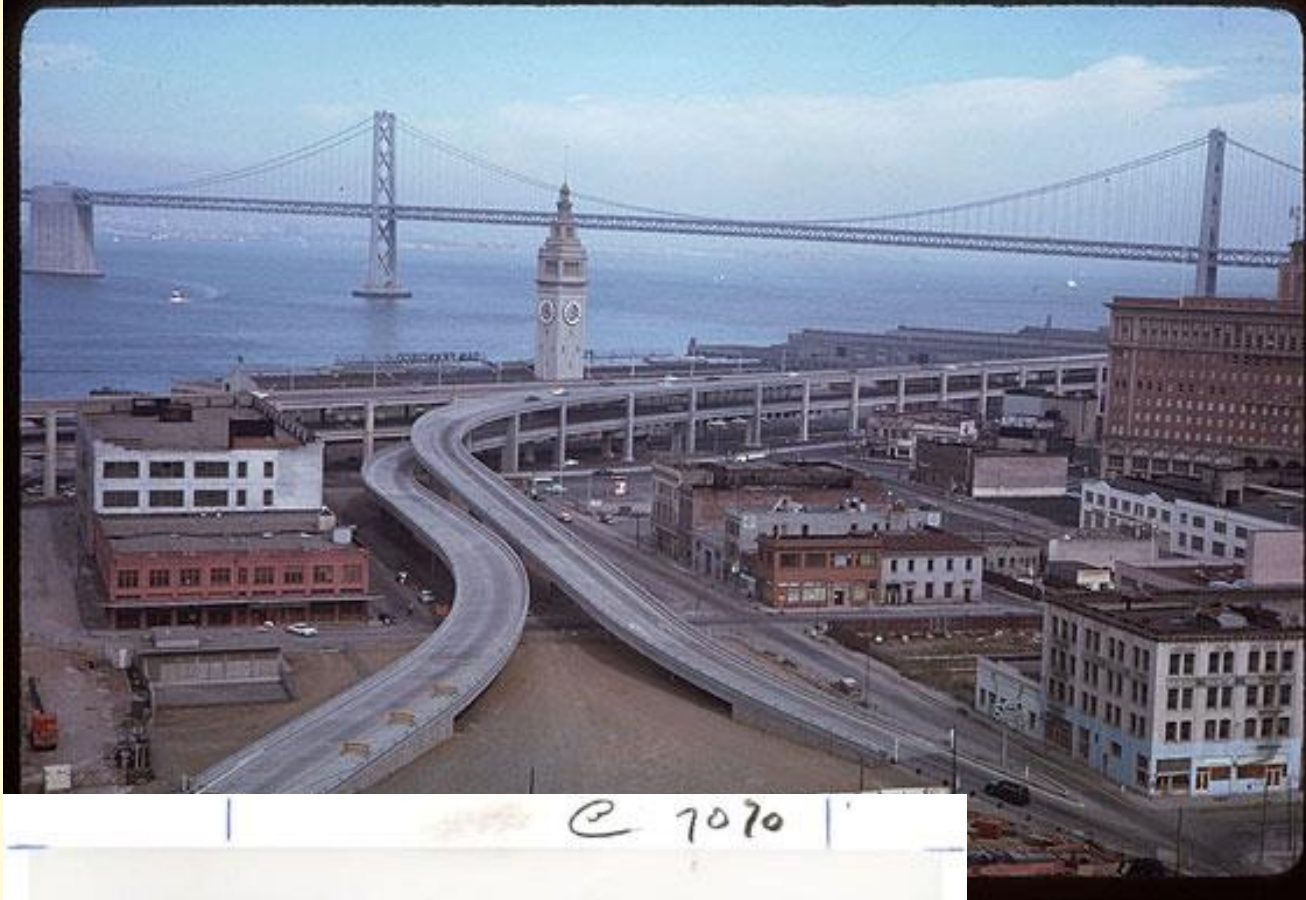
November 17, 2022

ARUP Perkins&Will multistudio

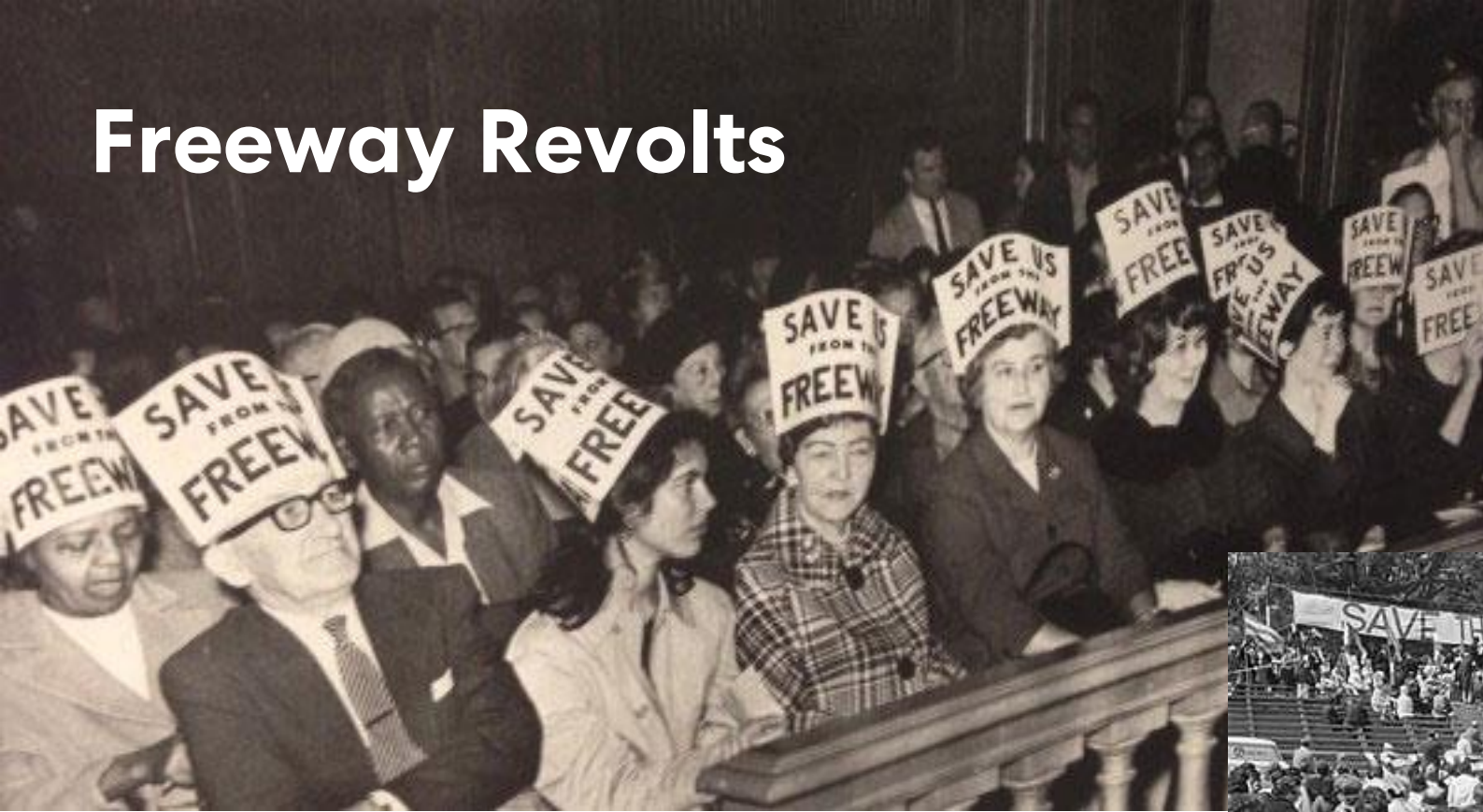
Agenda

1. **San Francisco Freeway Revolts**
2. **Goals & Values**
3. **US-101 Cesar Chavez to 5th**
4. **Central Freeway**
5. **Next Steps & Discussion**

Freeway Revolts



Freeway Revolts



1960s



Freeway Revolts



1990s



Octavia Boulevard

Key Facts

Completed in 2002

Elevated Segment 1 mile

Rough cost \$100 million

7 sites with 100% affordable housing, 15 sites with some affordable housing; primarily five-story mixed-use residential

Significant open space added

Land sales supports neighborhood transportation and street improvement projects

<https://www.cnu.org/what-we-do/build-great-places/octavia-boulevard>

<https://hoodline.com/2015/10/central-freeway-octavia-boulevard-patricias-green>



Presidio Parkway

Tunnel Top Parks



RAILYARD ALTERNATIVES & I-280 BOULEVARD (RAB) FEASIBILITY STUDY



USDOT Leadership

Secretary Buttigieg Introduces the RCP Program



“There are areas where the number of square feet of asphalt in a city ought to go down, and we ought to be supporting that kind of right-sizing if a local community sees that that’s beneficial for the long term.”

– Secretary Buttigieg,
March 2021

Goals and Values

Cities across America are rethinking freeways that rip apart neighborhoods.



Promoting Health and Livability over Auto Convenience

CARS
PEOPLE

Perkins&Will

Fundamental Values

for Reclaiming Urban Freeway Infrastructure

①

**Equitable
City-Building**



②

**Visionary
Placemaking**



③

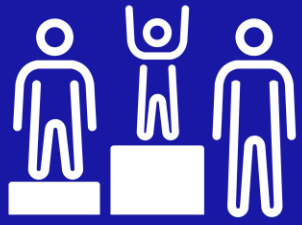
**Environmental
Resilience**



④

**Economic
Opportunity**





Equitable City-Building

- Facilitate inclusive engagement between residents, stakeholders, and policy-makers
- Prioritize livability for our most vulnerable communities
- Produce attainable and affordable housing
- Repair neighborhood social fabric



710 Freeway Reclaim Project, Pasadena, CA
Credit: Moule & Polyzoides Architects & Urbanists



Visionary Placemaking

- Create accessible public space
- Enable demographic and socioeconomic mixing
- Enhance health & wellbeing of the people and the community

Octavia Boulevard (Central Freeway Removal),
San Francisco, CA





Environmental Resilience

- Prioritize the needs of transit-dependent communities
- Create safe, all-ages, people-powered mobility options
- Infuse nature and open space



Hudson River Greenway (West Side Highway), New York, NY



Economic Opportunity

- Ensure a fiscally responsible approach
- Leverage value capture
- Invest in the long-term economic success of communities of color
- Increase access to capital for local business and entrepreneurs



Boston Central Artery, Boston, MA

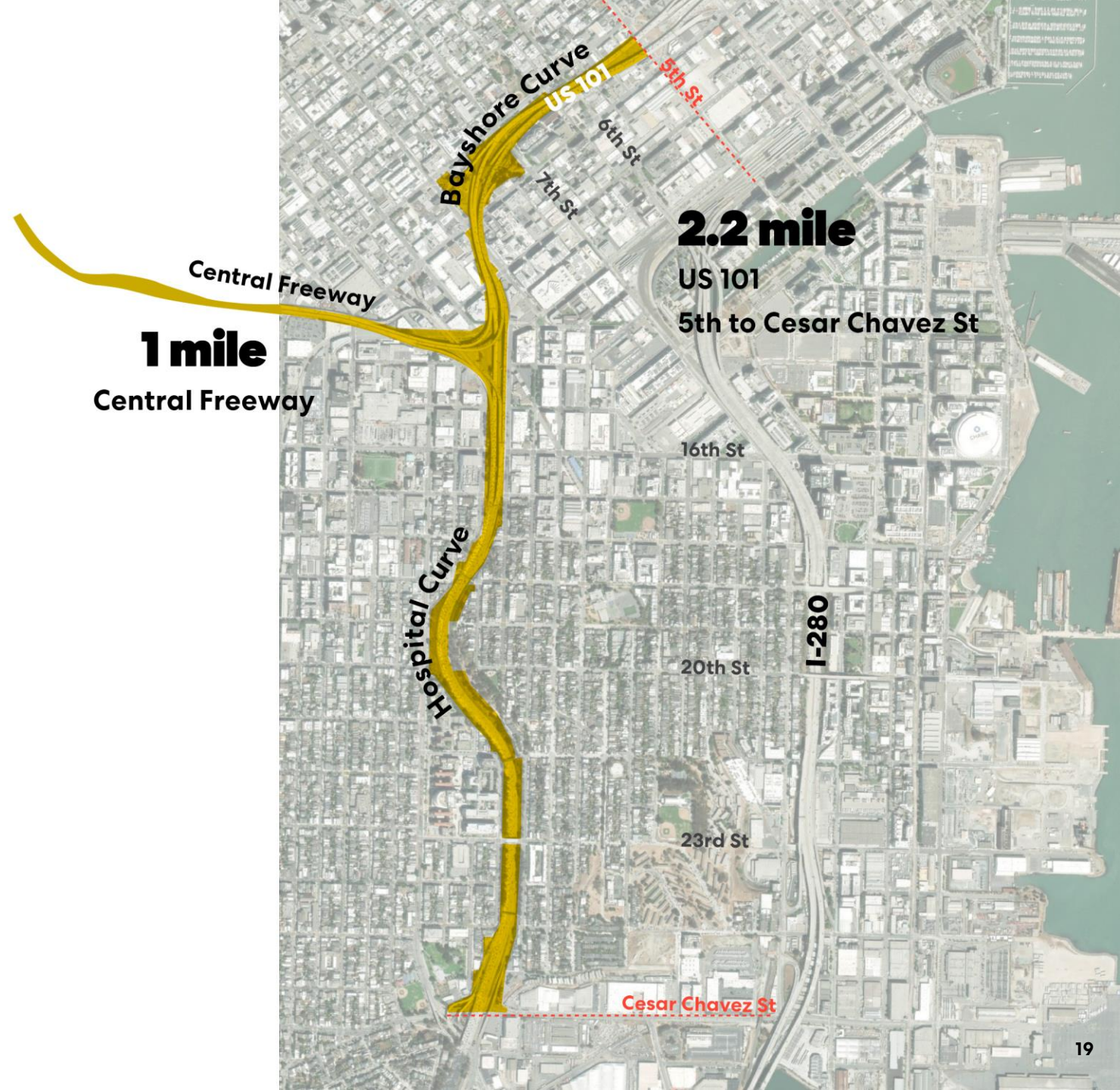
Perkins&Will

US-101 Cesar Chavez to 5th

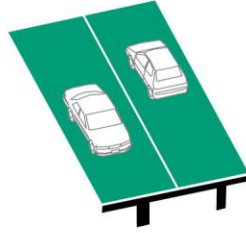
Opportunity

Reclaiming Lost Land

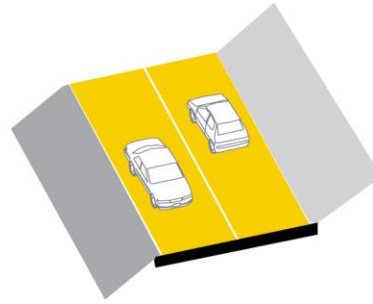
- 2.2 miles of Bayshore Curve and Hospital Curve from 5th Street to Cesar Chavez Street
- 1 mile of Central Freeway



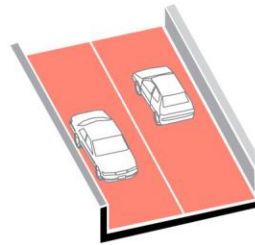
US-101 Configuration



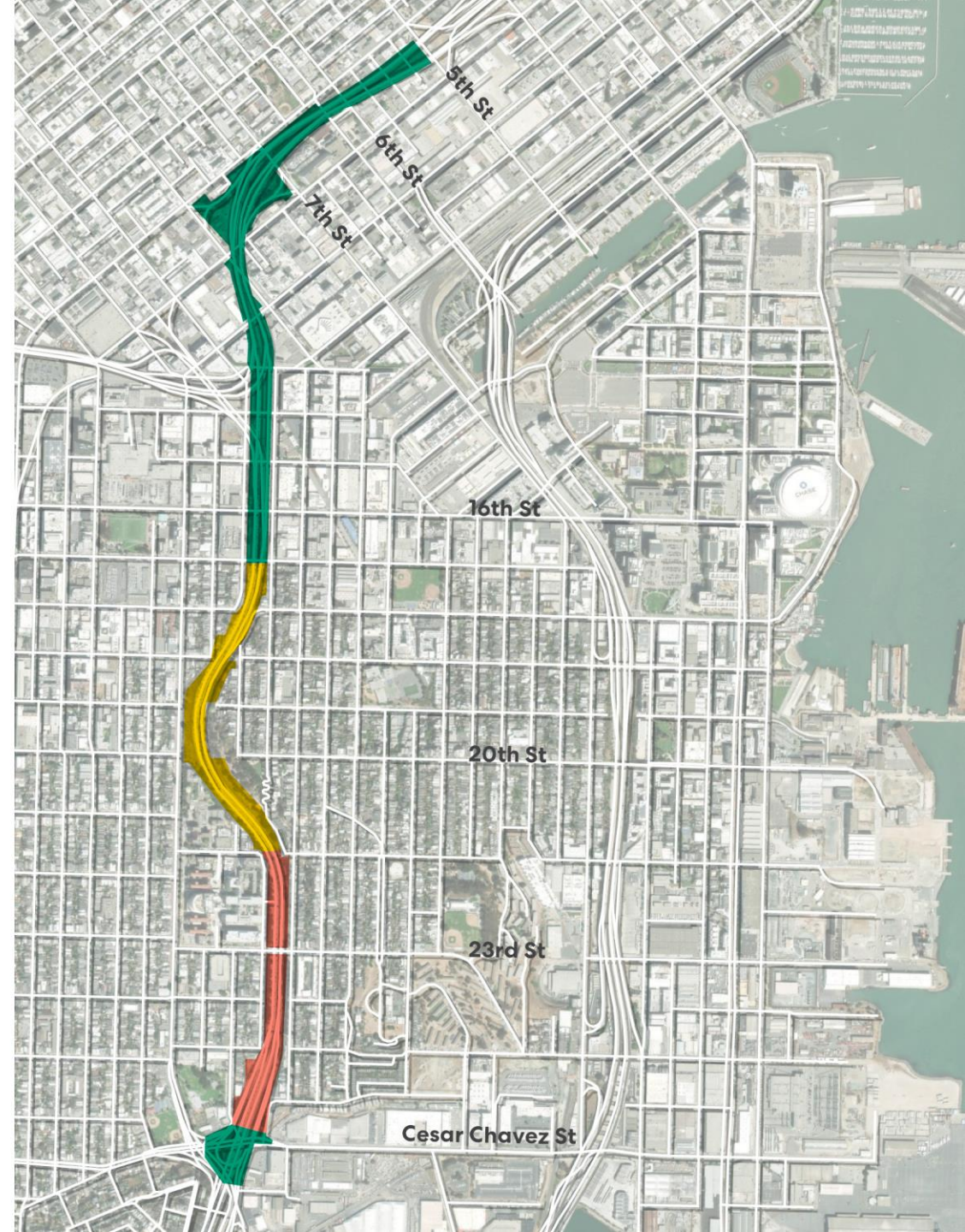
Primarily on Viaduct



Primarily at Grade



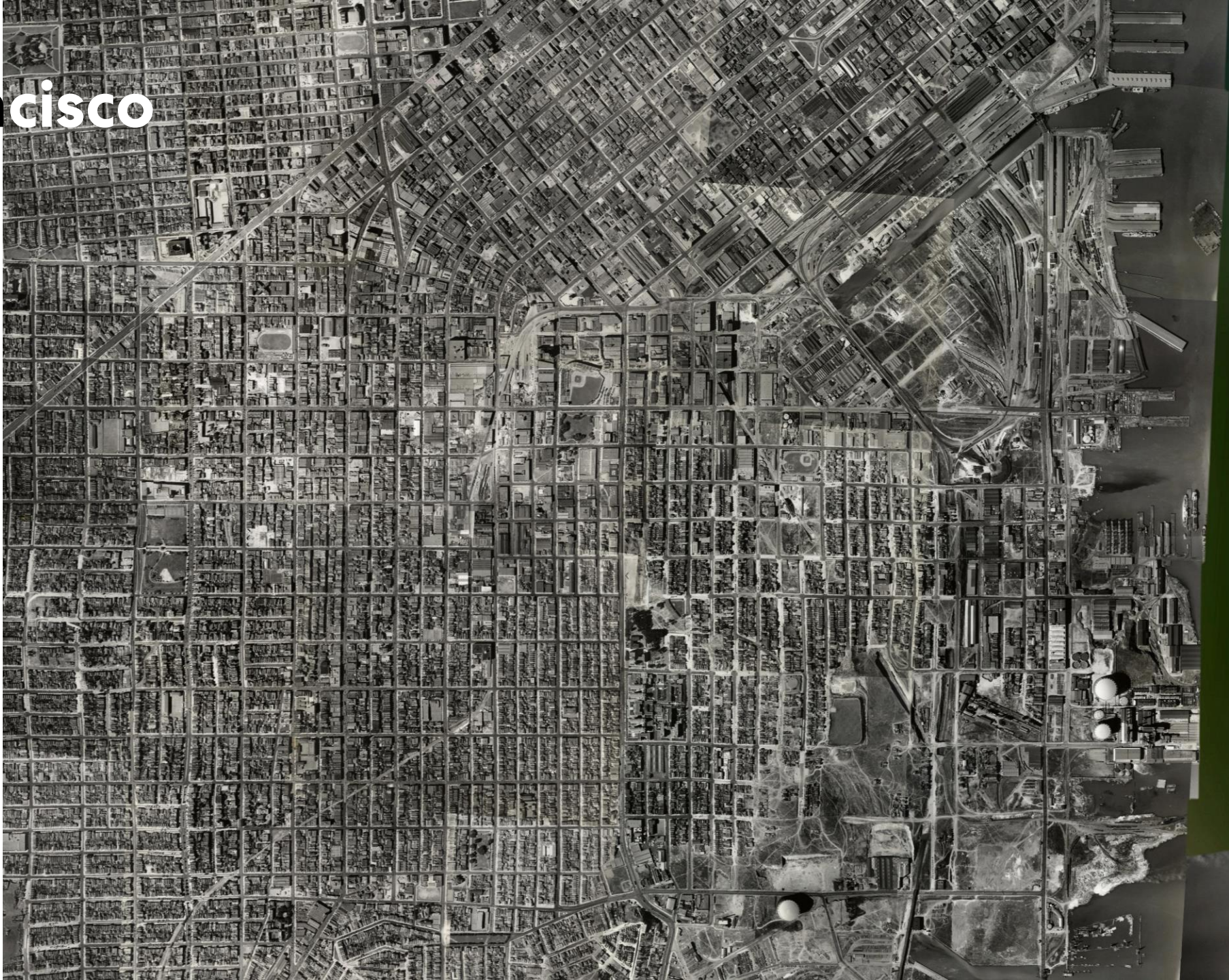
Primarily in Trench



San Francisco

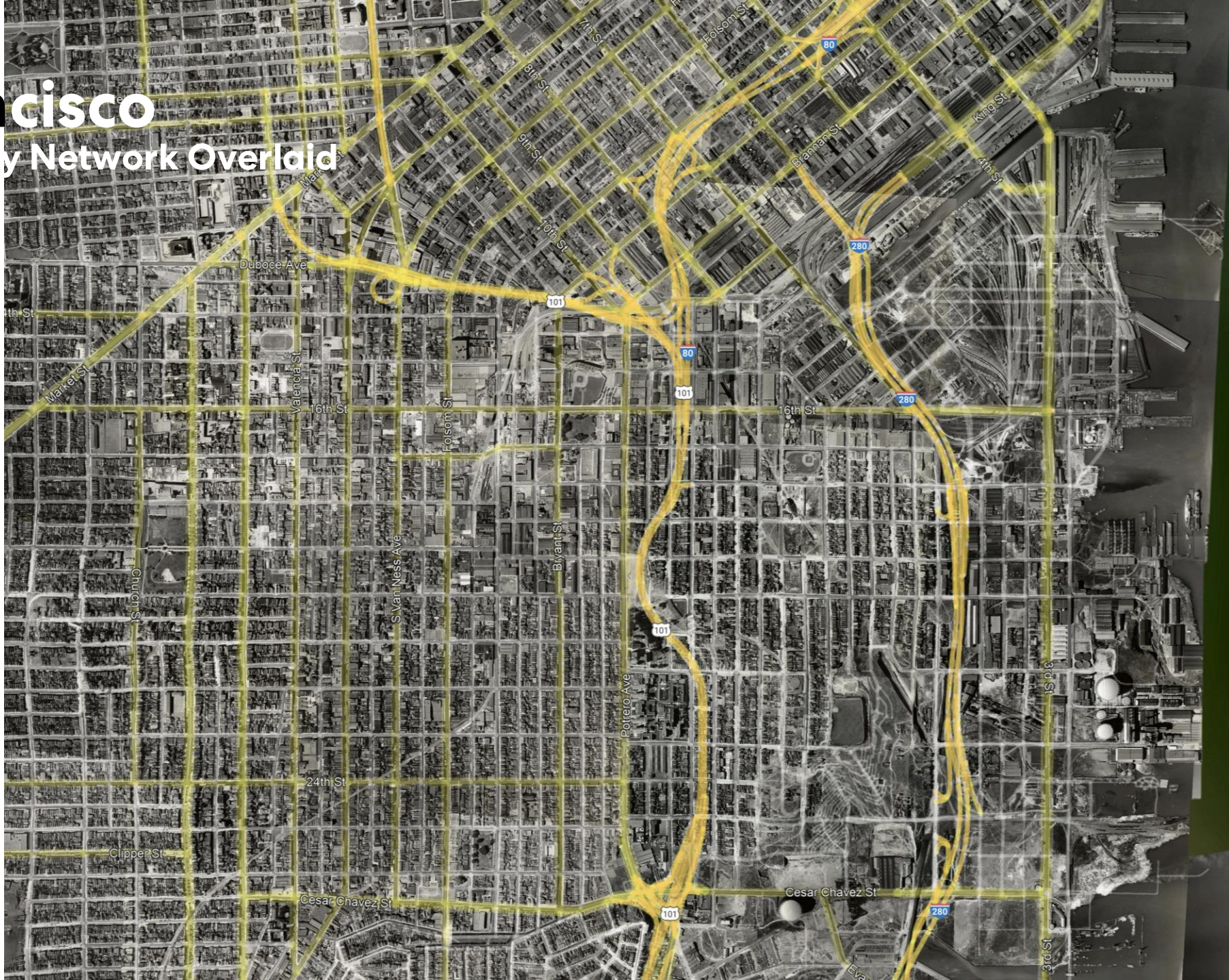
Pre-Freeways

→
1938



San Francisco

Current Freeway Network Overlaid



Today's Freeways on
1938 Neighborhood
Fabric

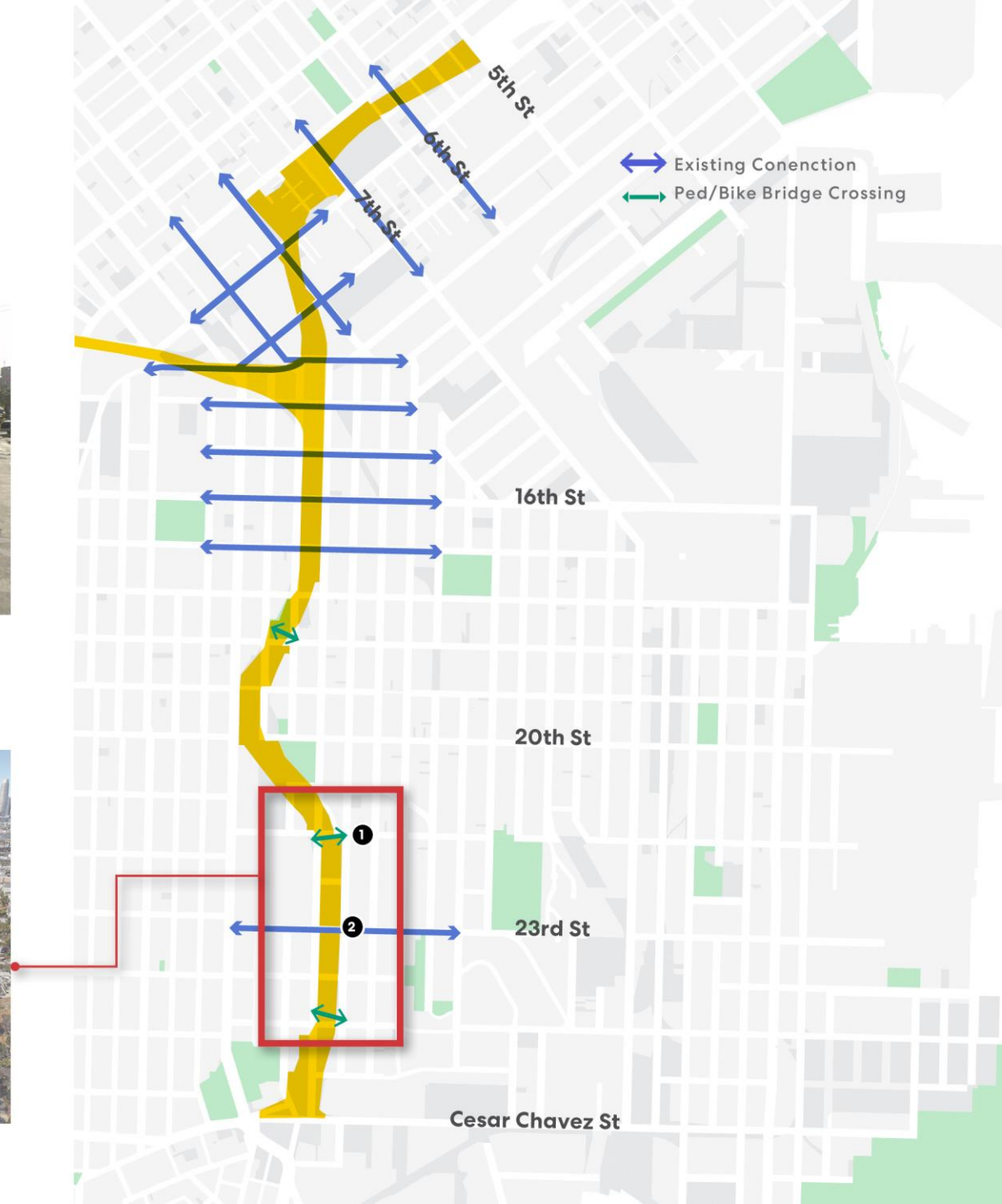
Limited Connectivity



① 22nd St Pedestrian Bridge Crossing



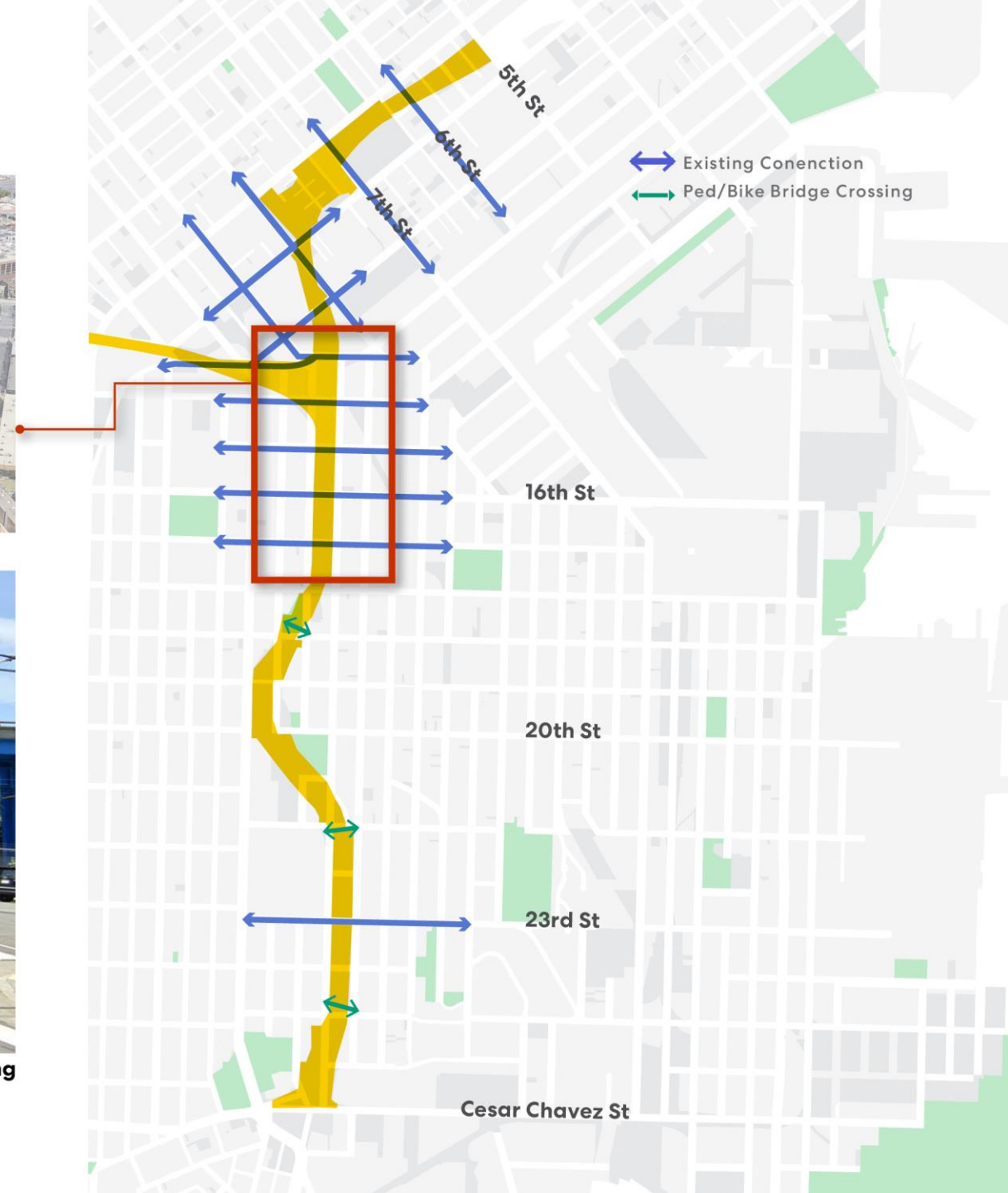
② 23rd St Bridge Crossing



Constrained Connectivity



17th St Under Bridge Crossing



Existing Assets and Neighborhood

Transit Amenities



Caltrain Station



MUNI Stop

Education Amenities



Public School



Private School



College and University

Civic Amenities



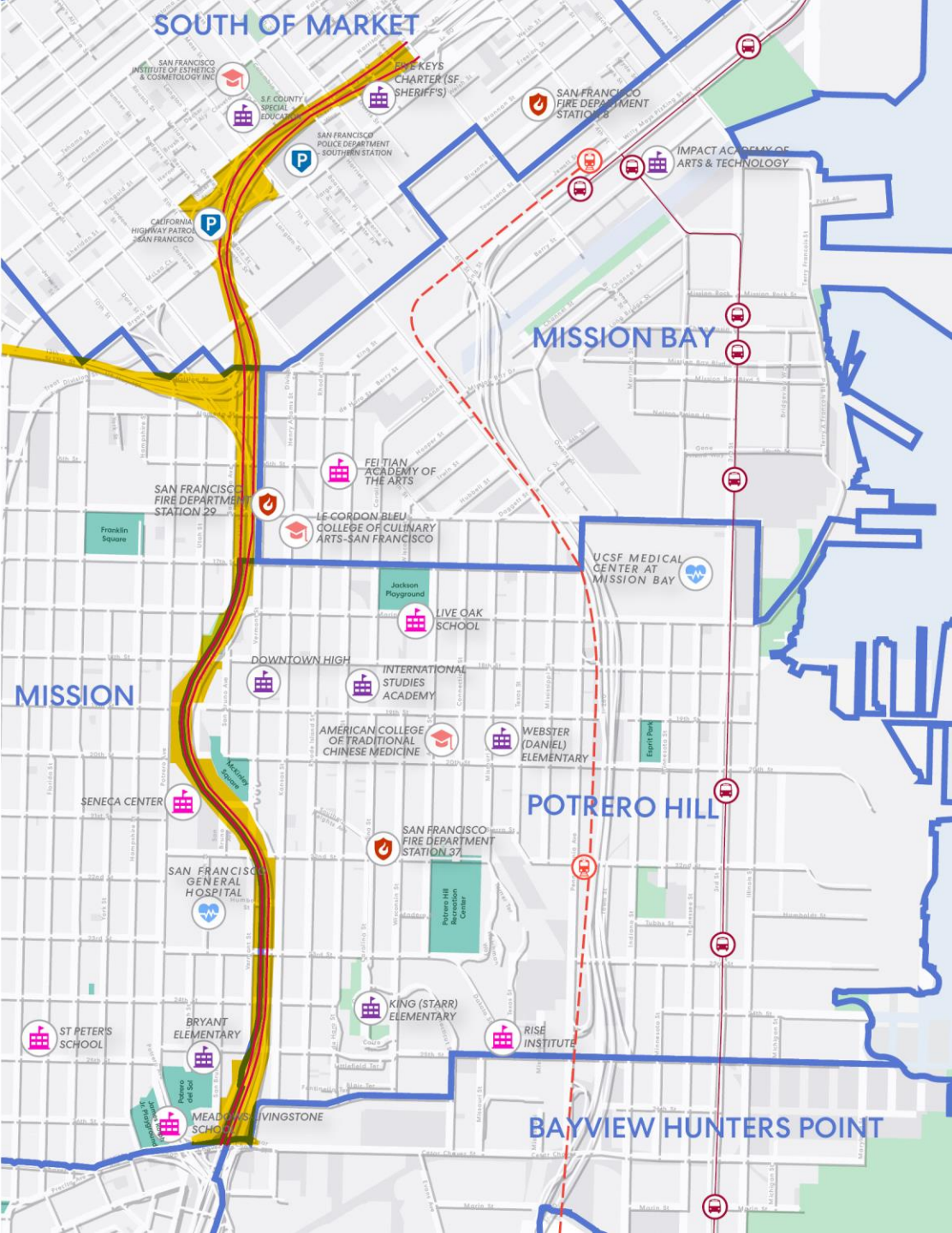
Fire Station



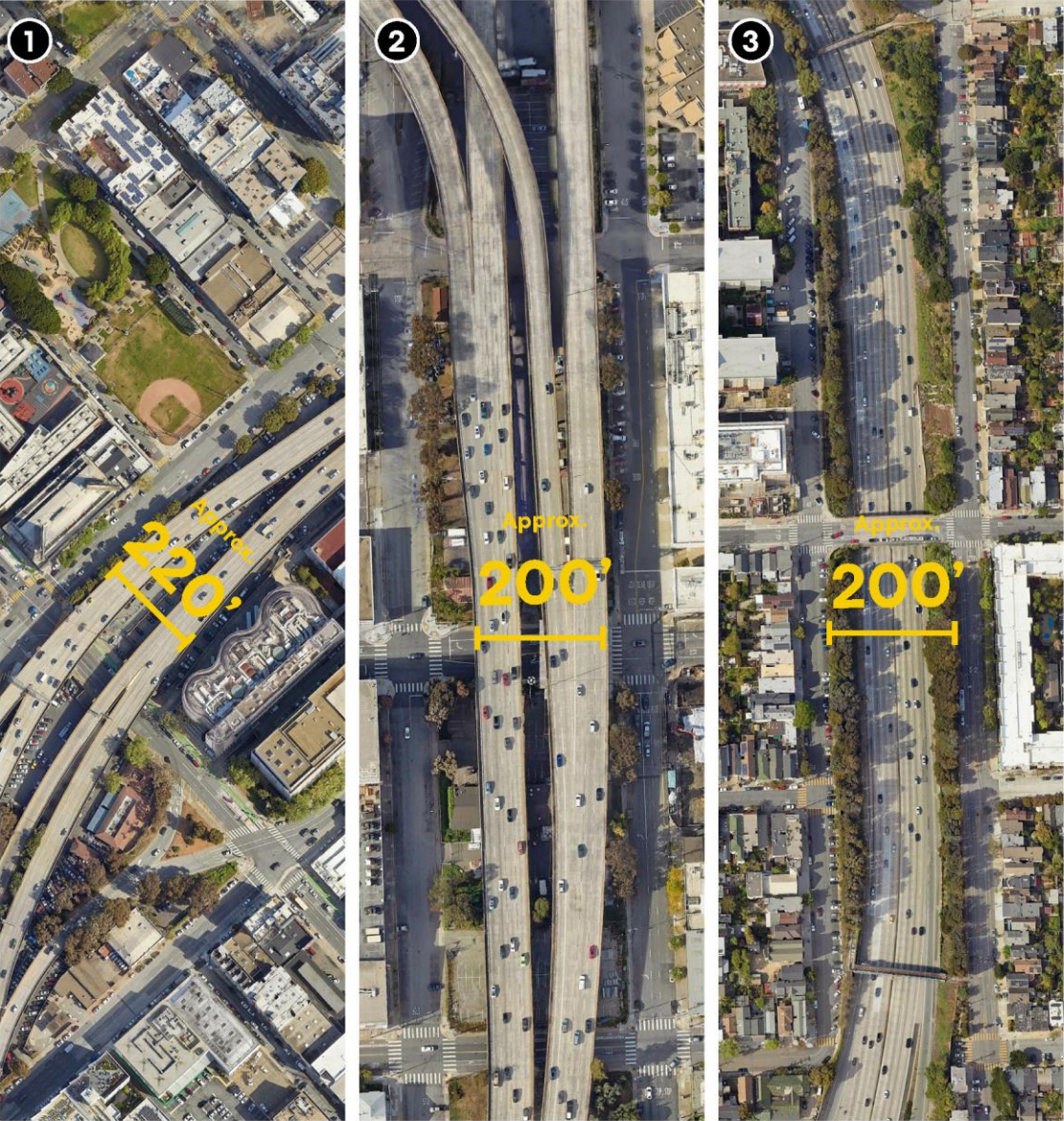
Hospital



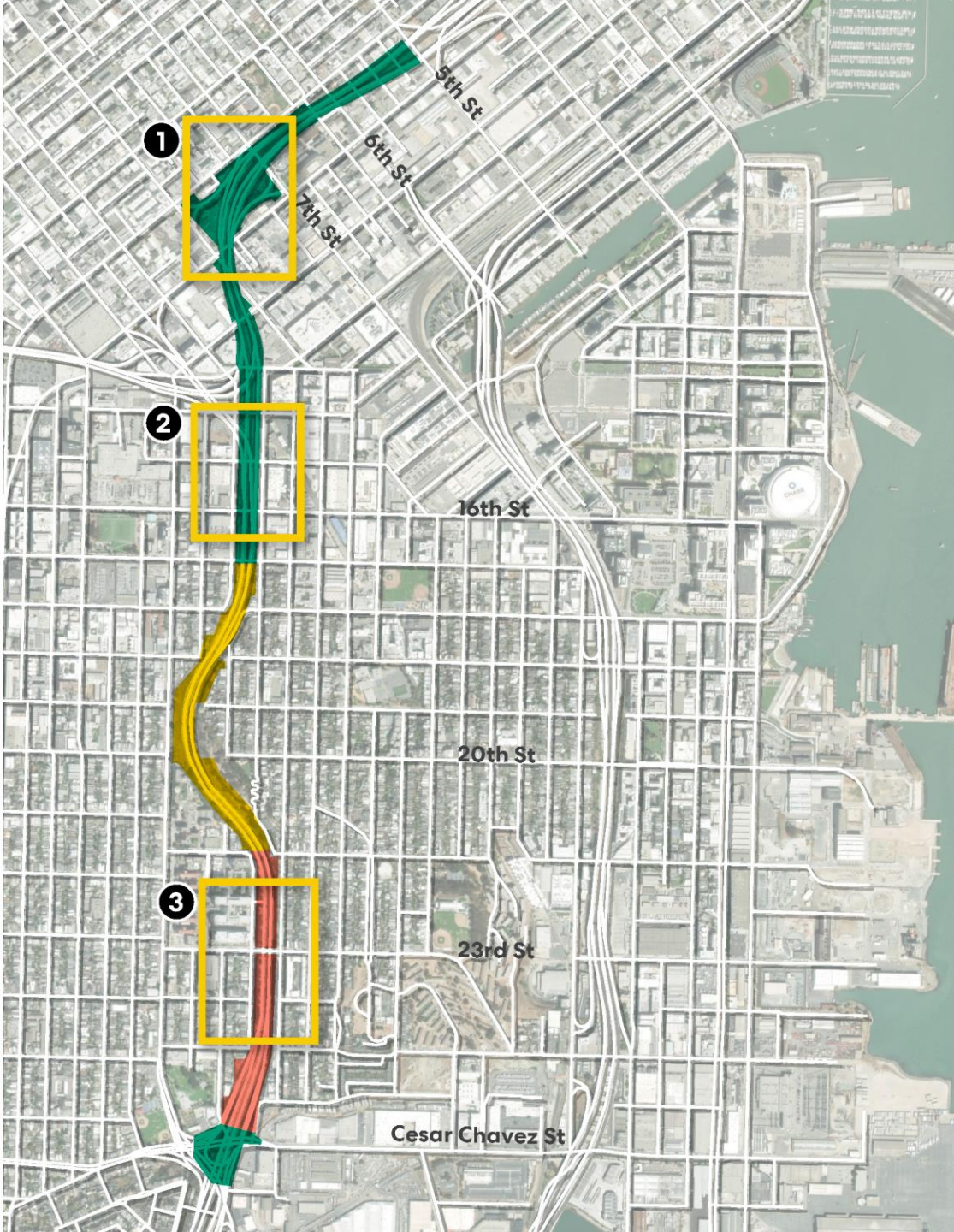
Local Law Enforcement



Existing Right-Of-Way



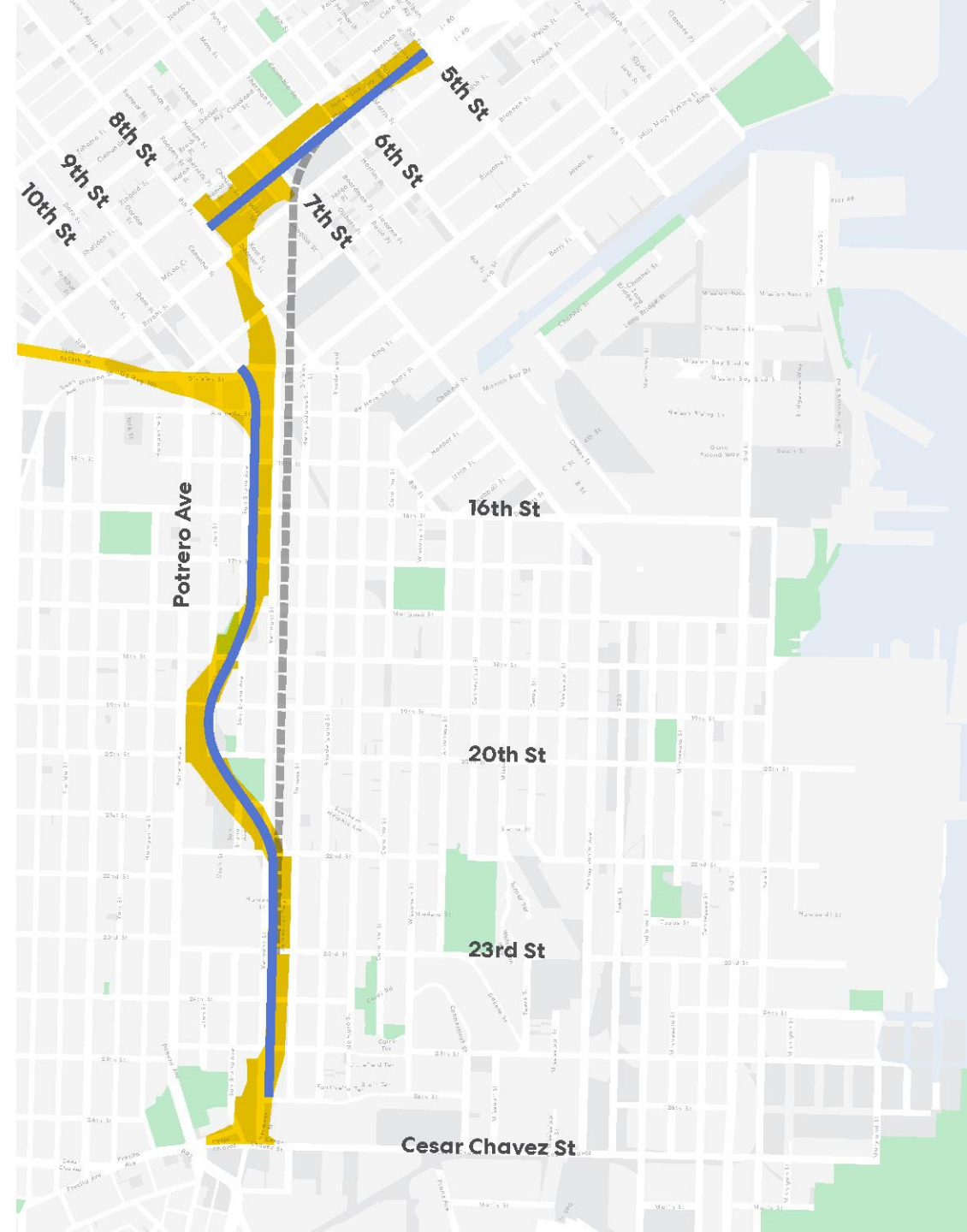
ARUP Perkins&Will



US-101 Rethink

Burying Hospital Curve in a New Alignment

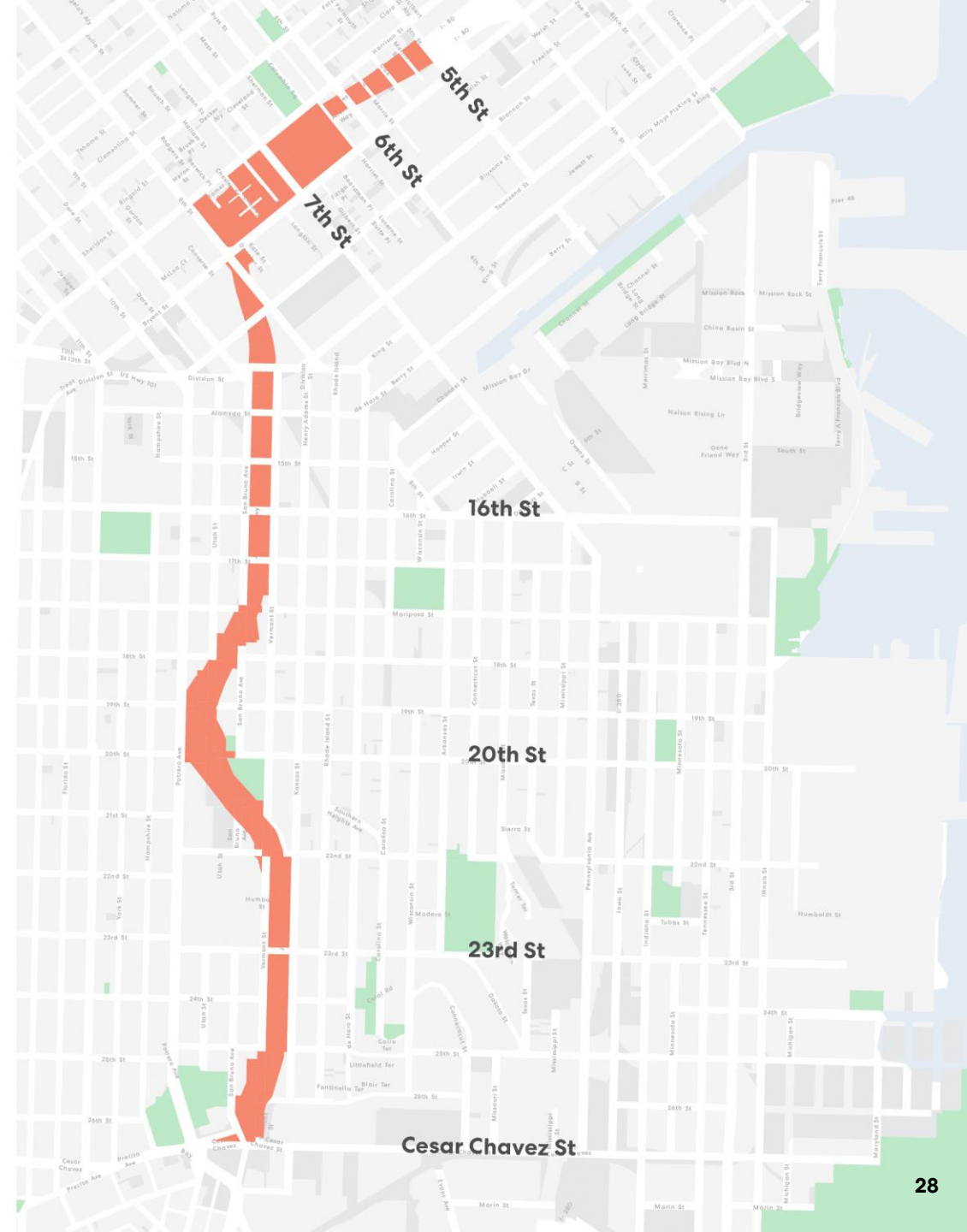
- Burying Hospital Curve freeway segment below Potrero Hill.
- Configuring a new at-grade boulevard in place of the freeway.
- Leaning on underutilized vehicle capacity on Potrero Avenue.



US-101 Opportunity

Reclaiming Urban Land

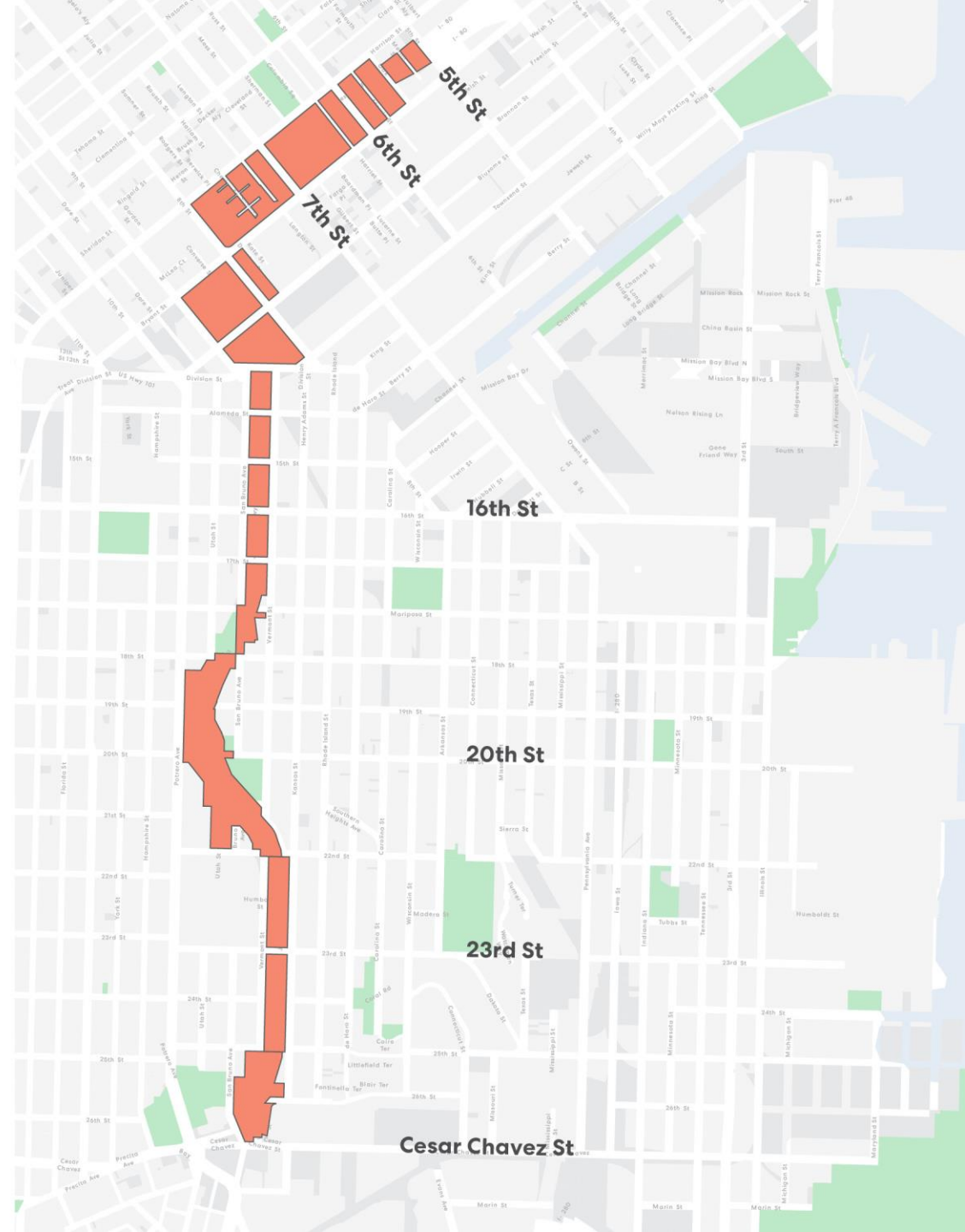
Freeway right-of-way removal frees up approximately **66 acres** of land.



US-101 Opportunity

Reclaiming Urban Land

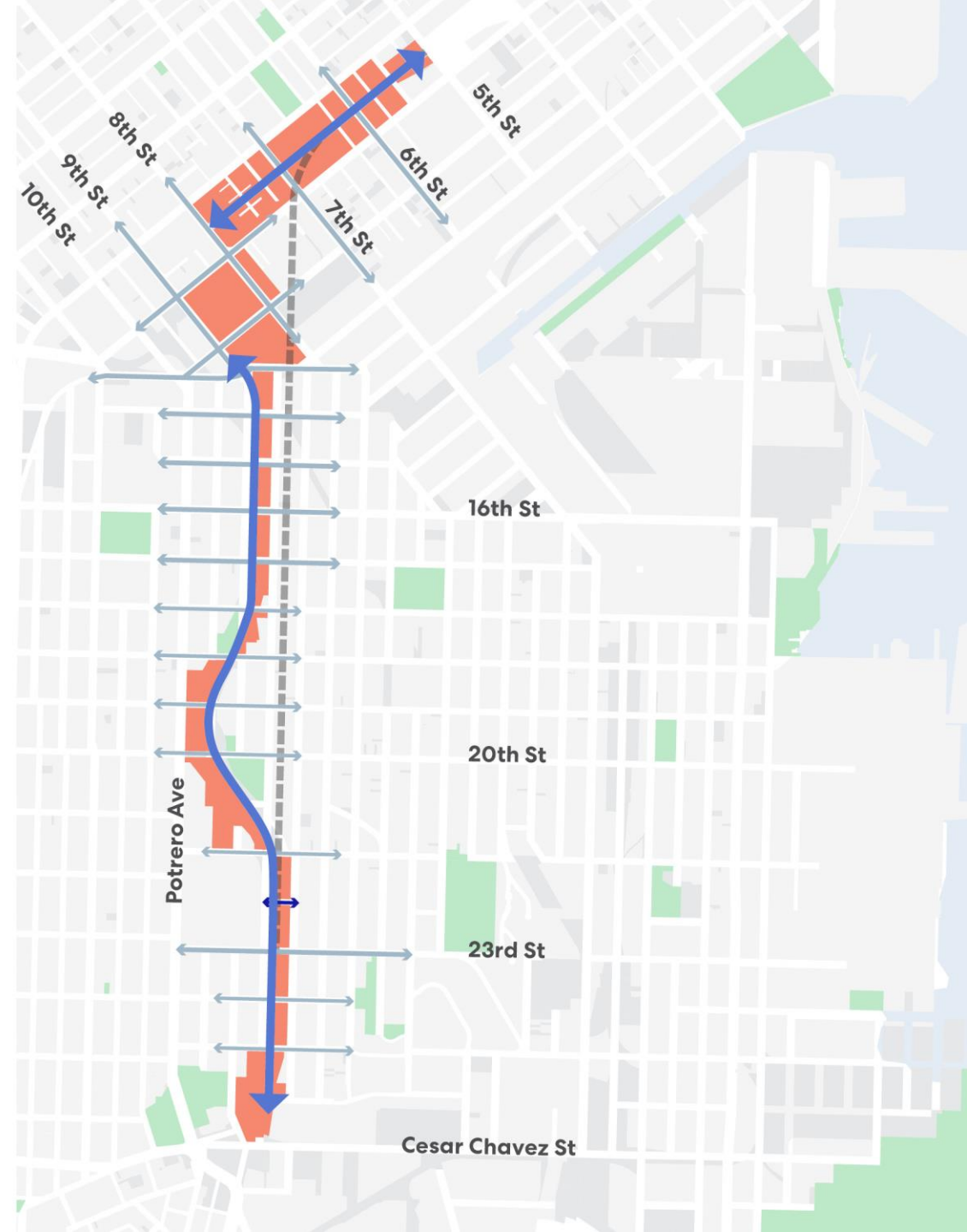
Freeway right of way and associated underutilized parcels within the block results in approximately **80 acres** of available land.



US-101 Opportunity

Introducing an Urban Boulevard

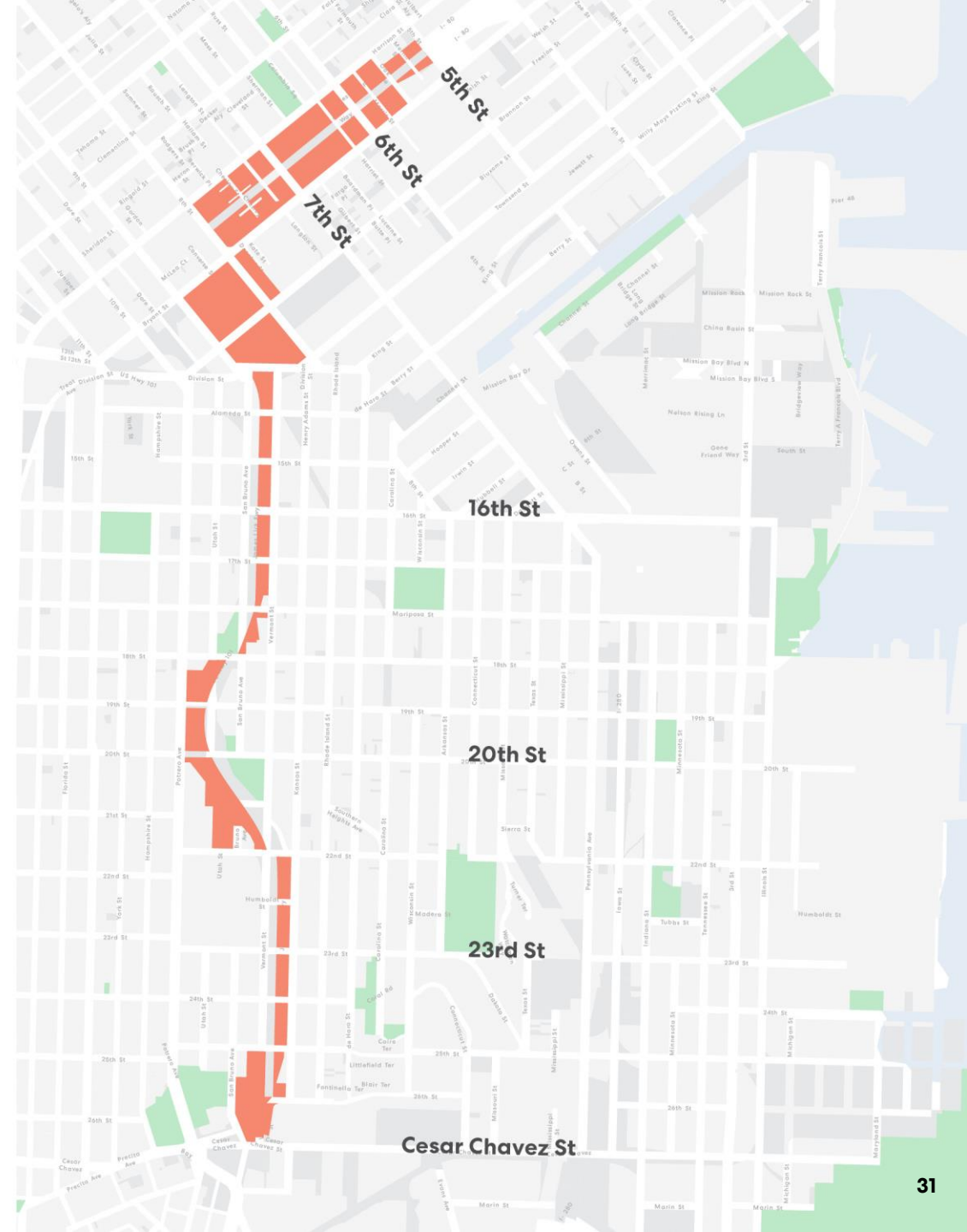
Configuring a new at-grade boulevard in place of the freeway and re-establishing the lost connectivity re-stitches severed neighborhoods.



US-101 Opportunity

Reclaiming Urban Land

The space take for a new north-south boulevard and new east-west street connectivity leaves approximately **67 acres** of available land.



Mixed Density Scenario

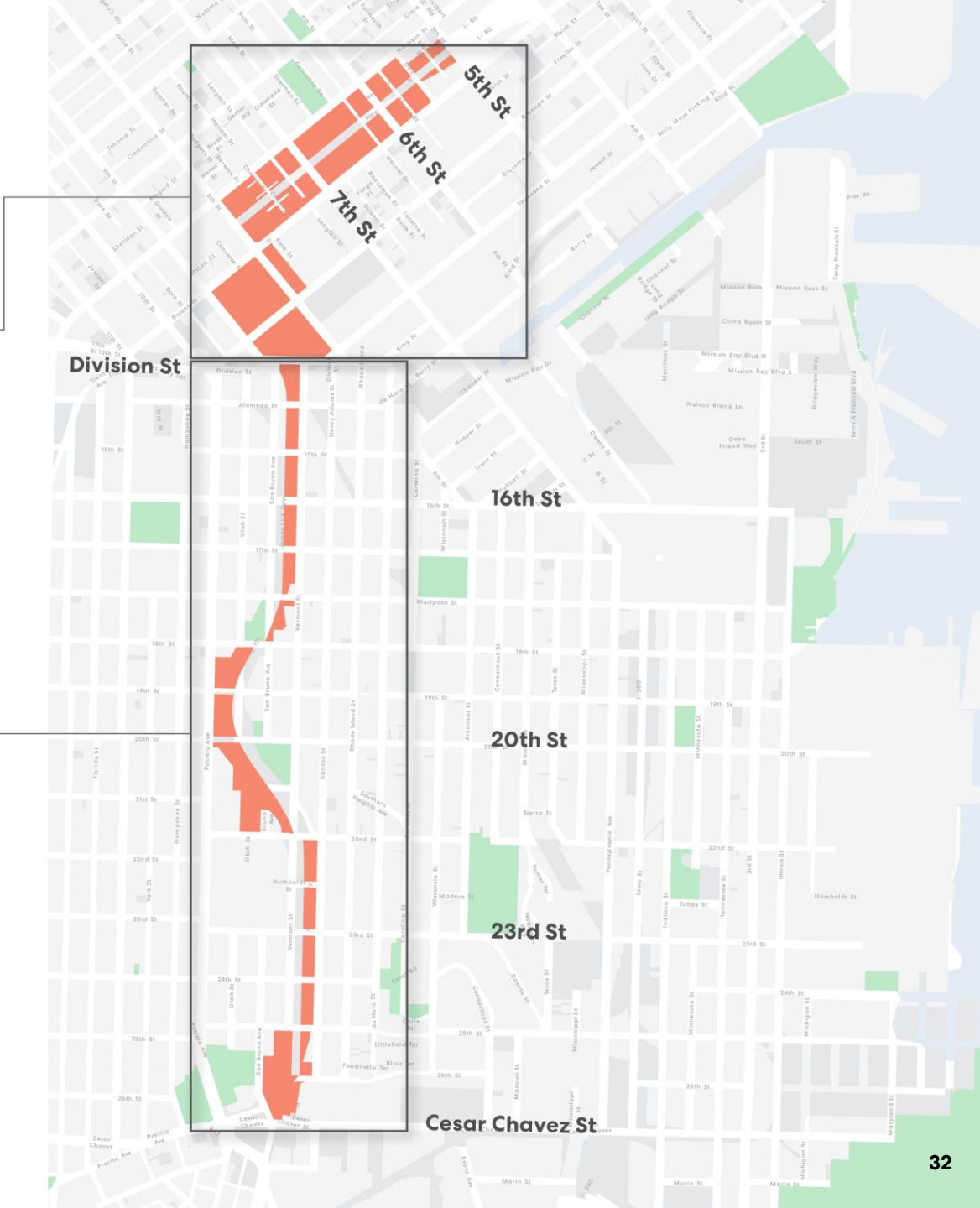
High Density

5TH TO DIVISION ST	36	ACRES
DENSITY	250	DU/ACRE
UNITS YIELDS	8,900	UNITS

Mix of Low&Medium Density

DIVISION ST TO CESAR CHAVEZ	31	ACRES
DENSITY	130	DU/ACRE
UNITS YIELDS	4,100	UNITS

TOTAL UNITS	13,000	UNITS
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US-101 Opportunity



5TH ST.

CENTRAL
FREEWAY

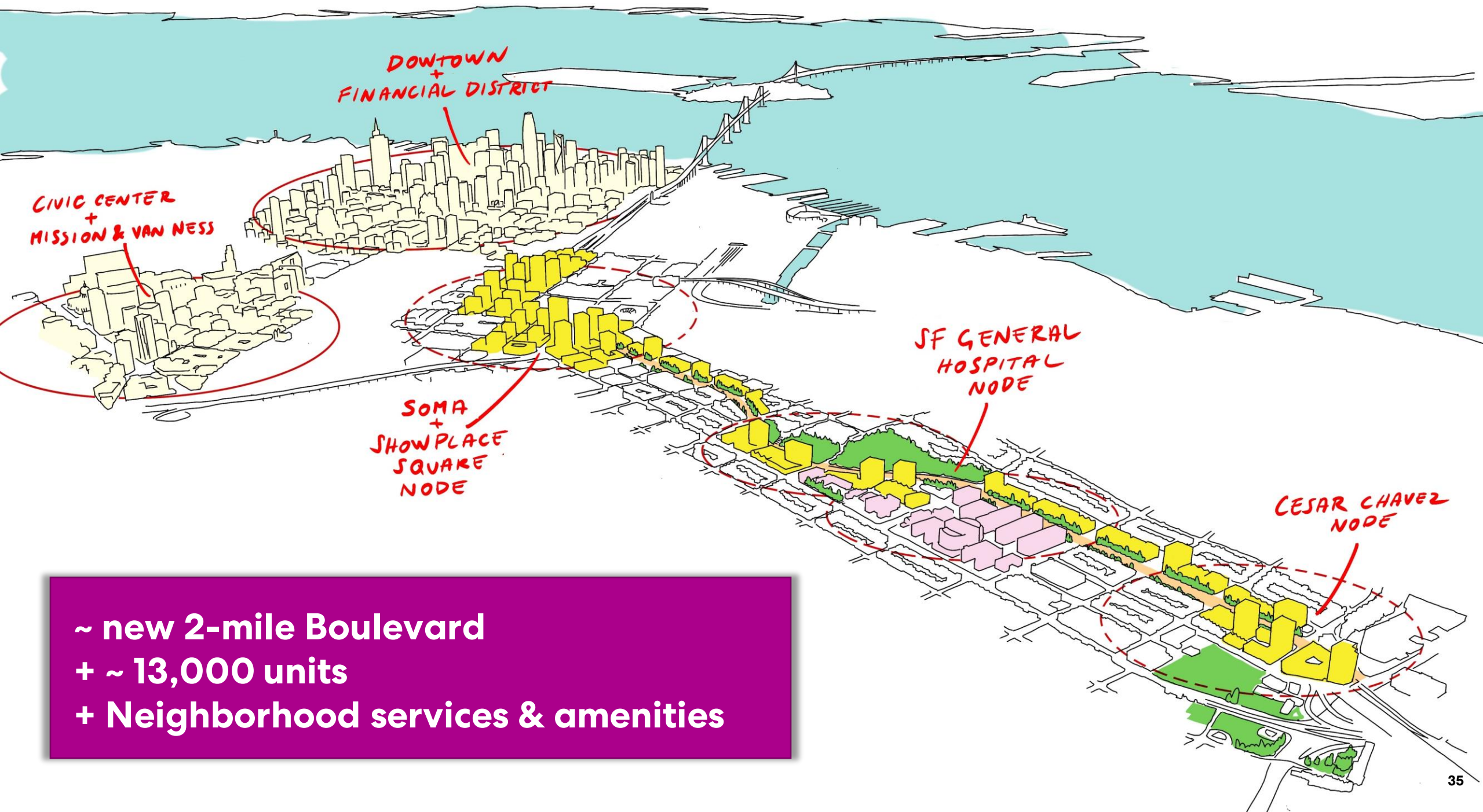
HOSPITAL
CURVE

CESAR
CHAVEZ ST.

US-101 Opportunity

Reclaiming Urban Land





~ new 2-mile Boulevard
+ ~ 13,000 units
+ Neighborhood services & amenities

Communities of Low Carbon Lifestyle



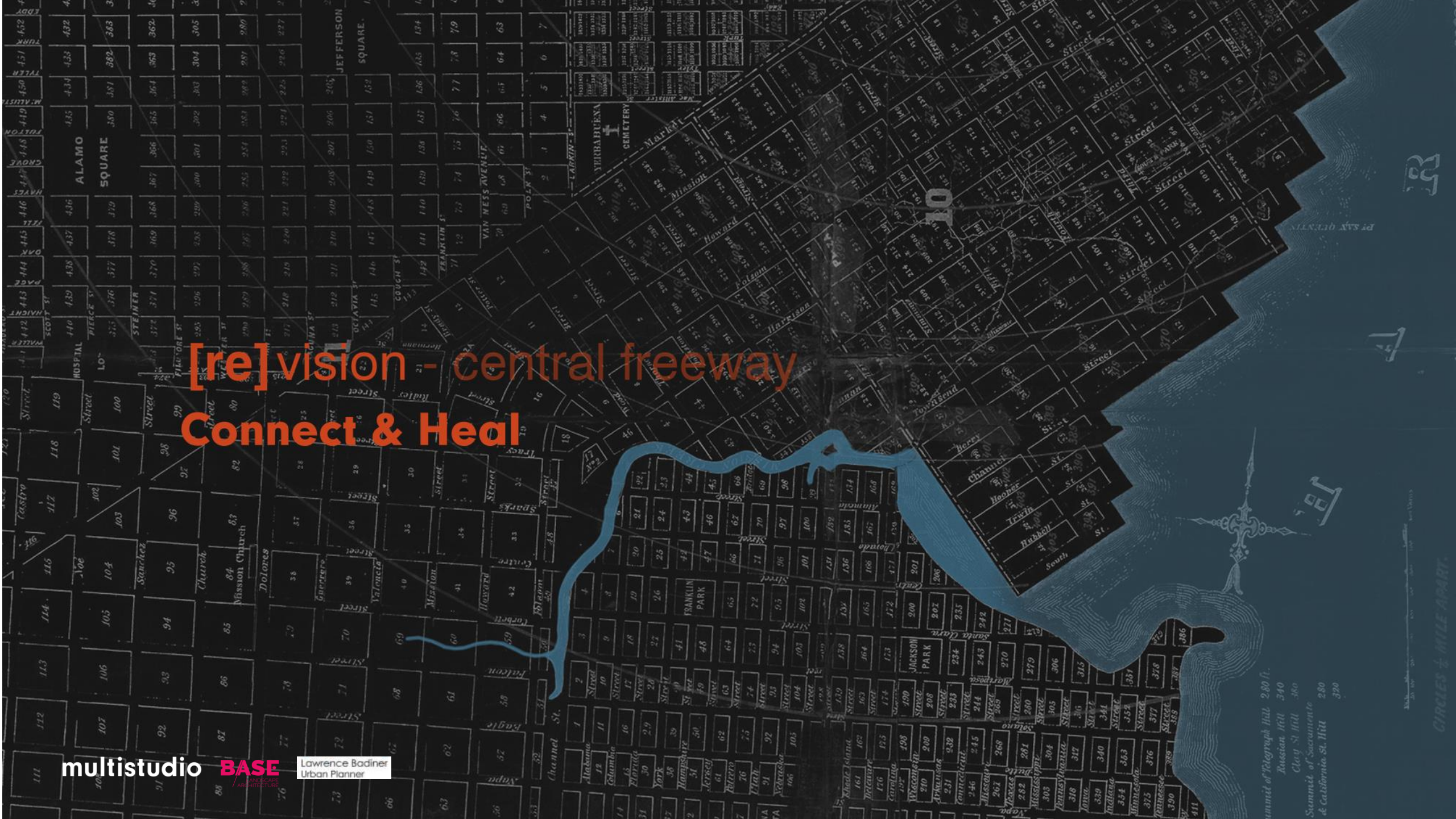
Perkins&Will

Places of Strong Cultural Identity & Economic Vitality



Perkins&Will

Central Freeway



[re]vision - central freeway

Connect & Heal

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BASE
ARCHITECTURE

Lawrence Bodiner
Urban Planner

Summit of Telegraph Hill 280 ft.
Russian Hill 340
Clay St Hill 360
Summit of Sacramento
& California St. Hill 280
390

CIRCLES & MILE APART

Our Team



Bob Baum
Principal and
Board Member
Multistudio



Teresa Jan
Director of Climate
Positive Design
Multistudio



Sean Zaudke
Principal
Multistudio



Patricia Algara
Founding Principal
BASE Landscape
Architecture



Larry Badiner
Urban Planner
Badiner Urban
Planning



**Liz Thelen-
Torres**
Associate
Principal, Director
of Business
Development
Multistudio

Aerial View, 1948



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LAWRENCE
ARCHITECTURE

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Urban Planner

Aerial View, 1993 (Central Freeway completed 1959)



Aerial View, 2020

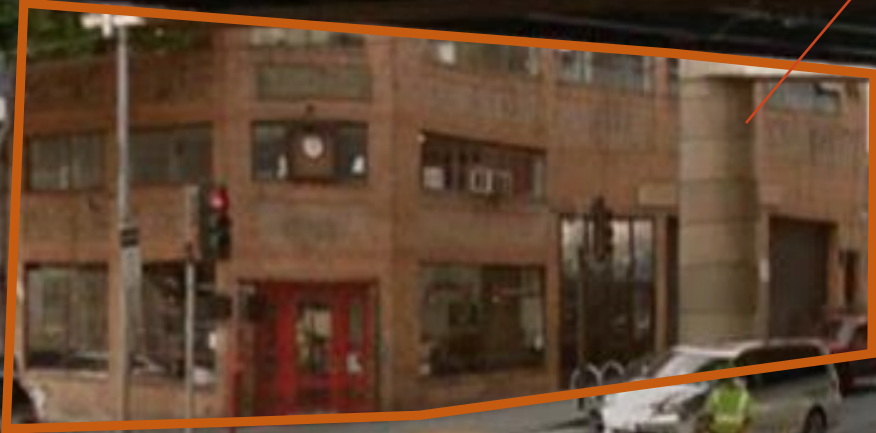


1700 Mission: Class A Historic Resource Built in 1927



The Intersection of Duboce and Mission, 1951

1700 Mission: Today



The Intersection of Duboce and Mission, 2022



THOMAS BROS.
Map of the
CITY AND COUNTY
OF
SAN FRANCISCO



SCALE IN FEET



PRESIDIO

SAN FRANCISCO BAY

RESIDENTIAL SECURITY MAP

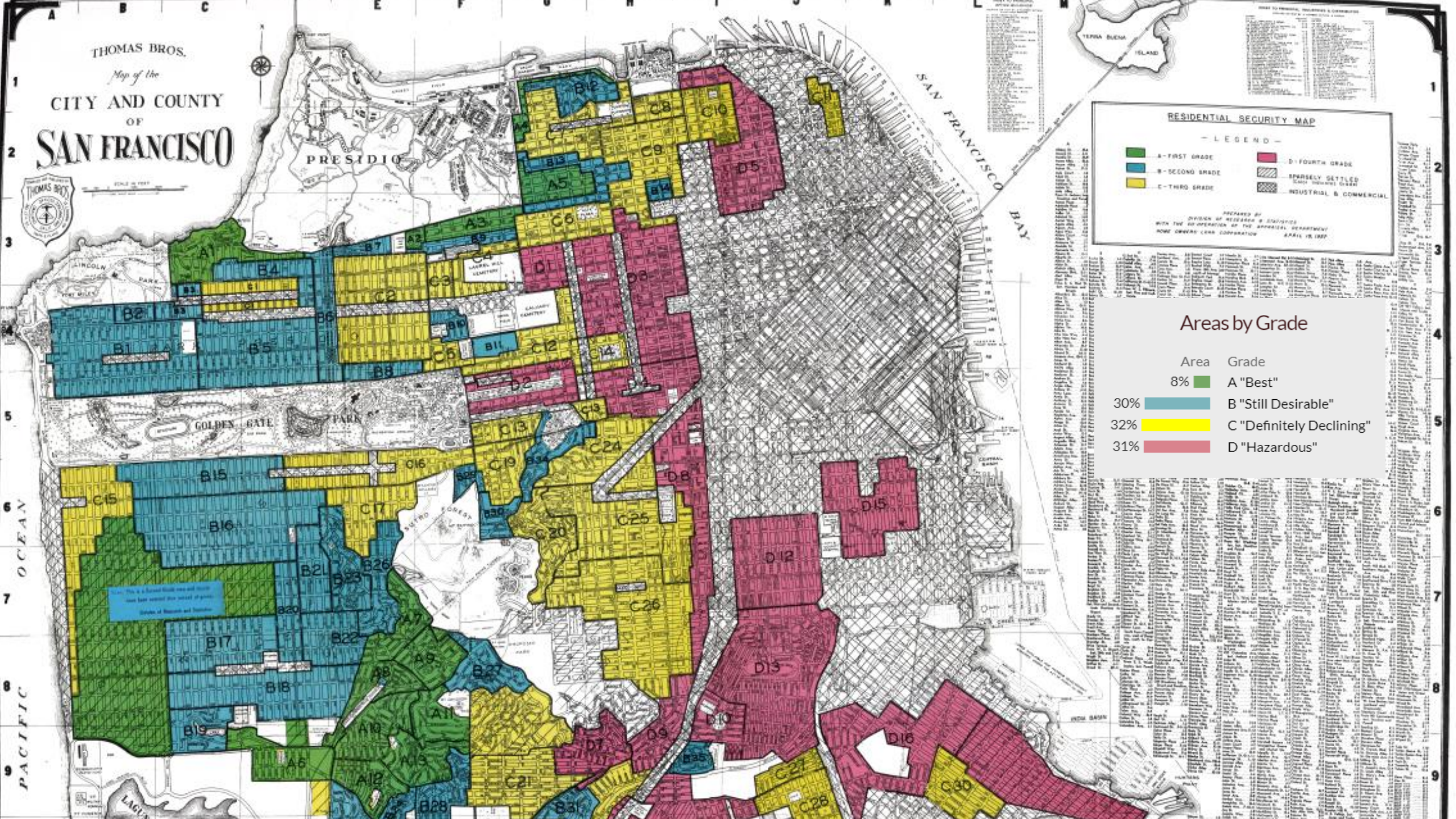
— LEGEND —

- A - FIRST GRADE
- B - SECOND GRADE
- C - THIRD GRADE
- D - FOURTH GRADE
- SPARSELY SETTLED
- INDUSTRIAL & COMMERCIAL

PREPARED BY
DIVISION OF RESEARCH & STATISTICS
WITH THE CO-OPERATION OF THE APPLICABLE DEPARTMENT
HOME OWNERS' LOAN CORPORATION APRIL 15, 1937

Areas by Grade

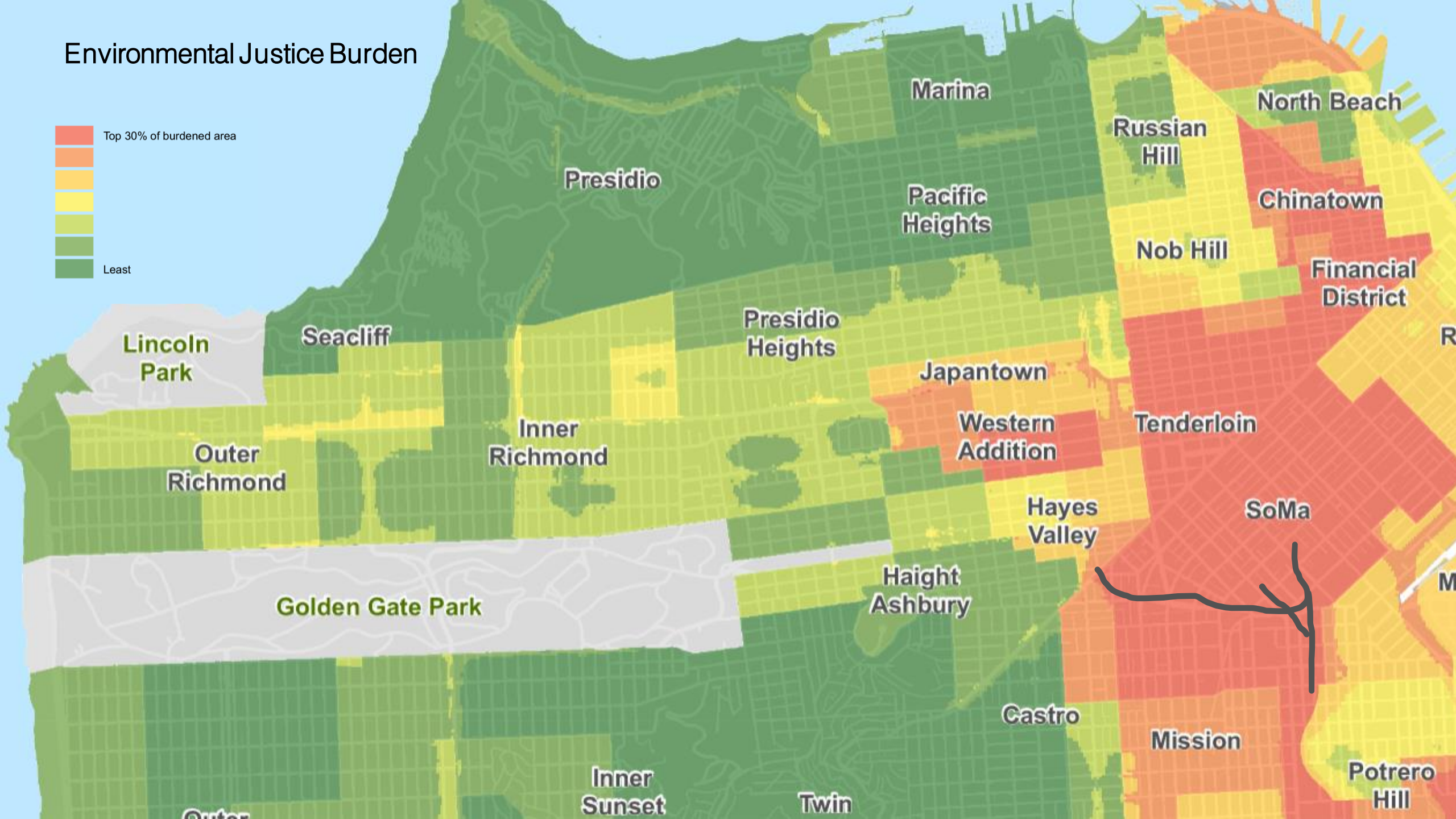
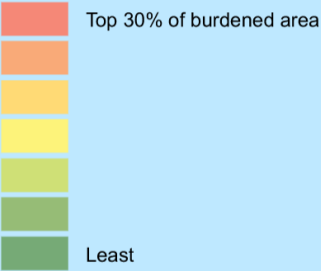
Area	Grade
8%	A "Best"
30%	B "Still Desirable"
32%	C "Definitely Declining"
31%	D "Hazardous"



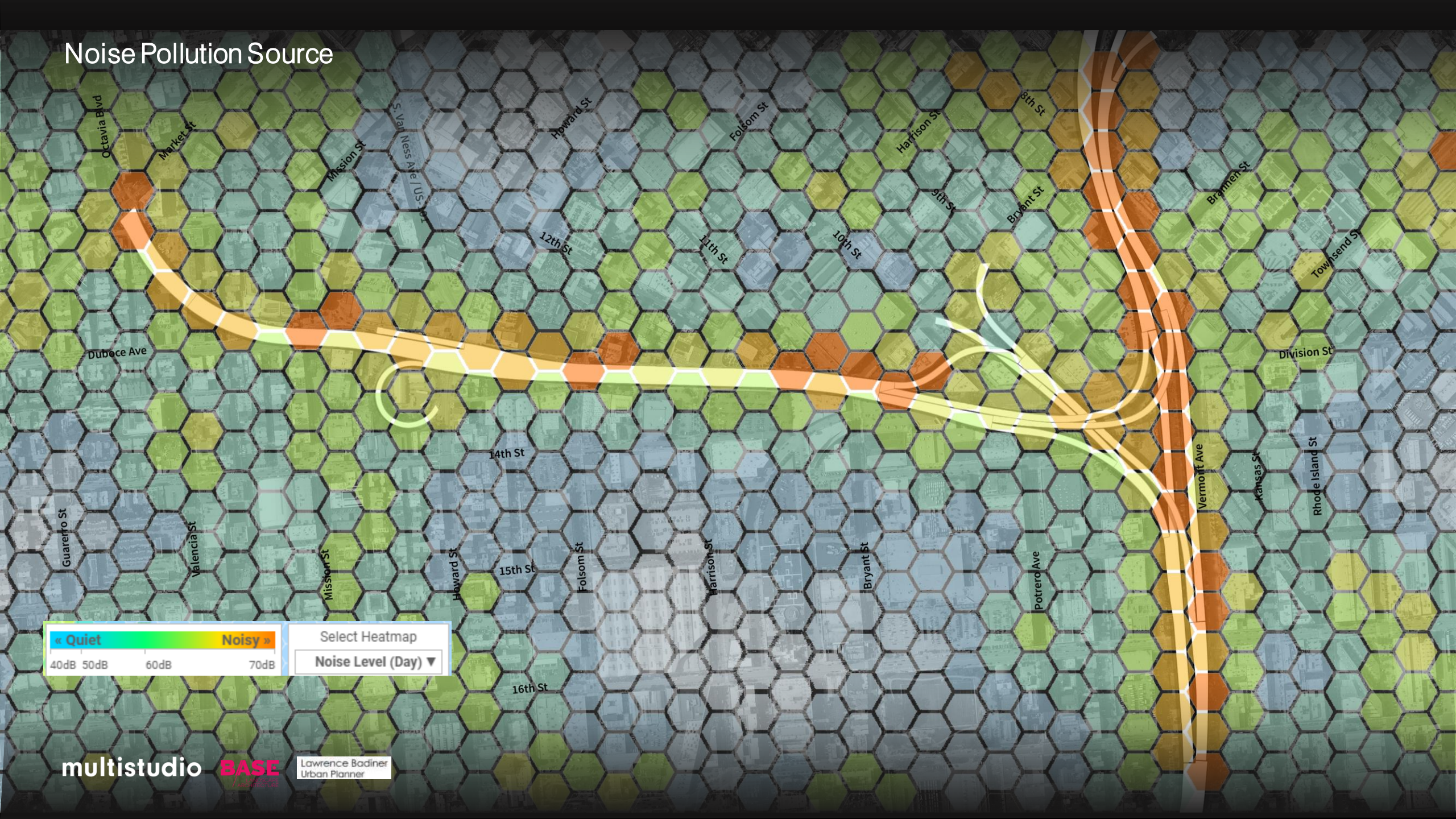
Owners Renters



Environmental Justice Burden



Noise Pollution Source



« Quiet

Noisy »

40dB

50dB

60dB

70dB

Select Heatmap

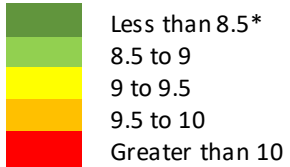
Noise Level (Day) ▼

Air Pollution Source

CENTRAL FREEWAY

Particulate Matter

Average annual concentration in micrograms per cubic meter of air



*does not occur in this region

Source: SFPDPH, BAAQMD

Lack of Open Space



SOMA West Skatepark

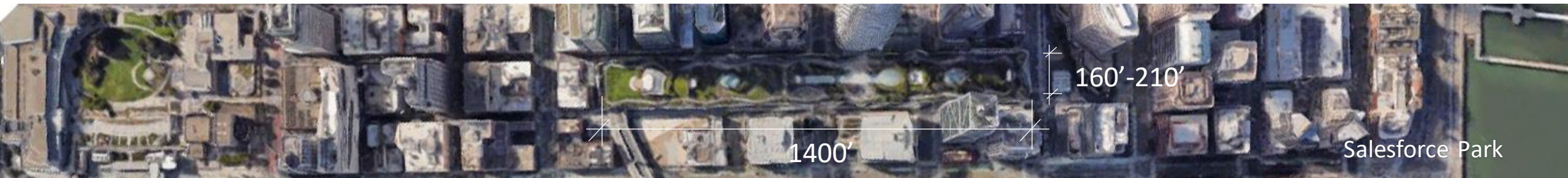
Central Freeway

- Moderate Priority
- High Priority
- Existing Open Space

Daylighting Mission Creek



Urban Park Scale Comparison



Unique local Culture and Vibrancy

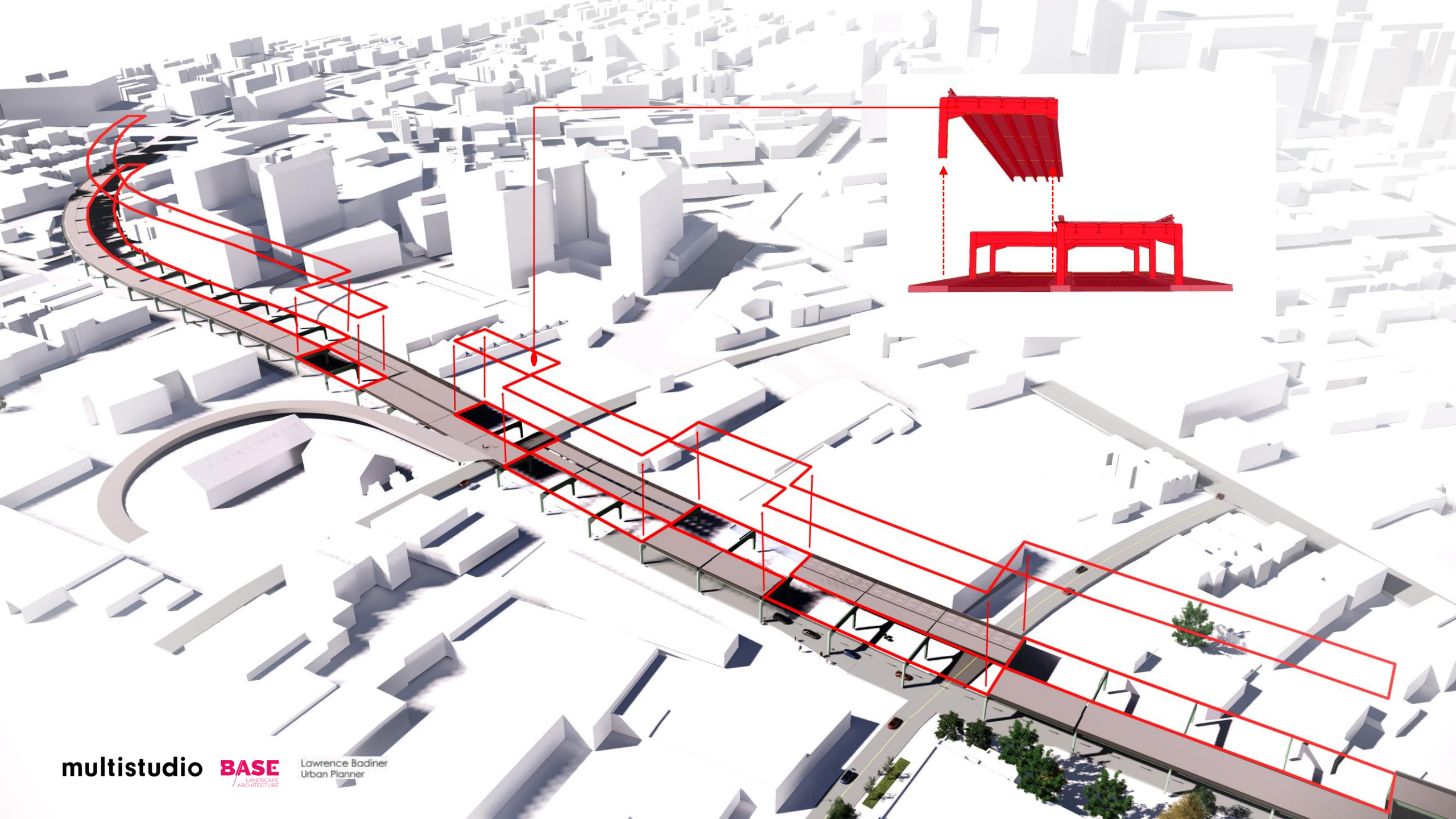


Extension of Octavia

Traffic Plan (Unity Boulevard Proposal, April 2015)



Reusing Freeway

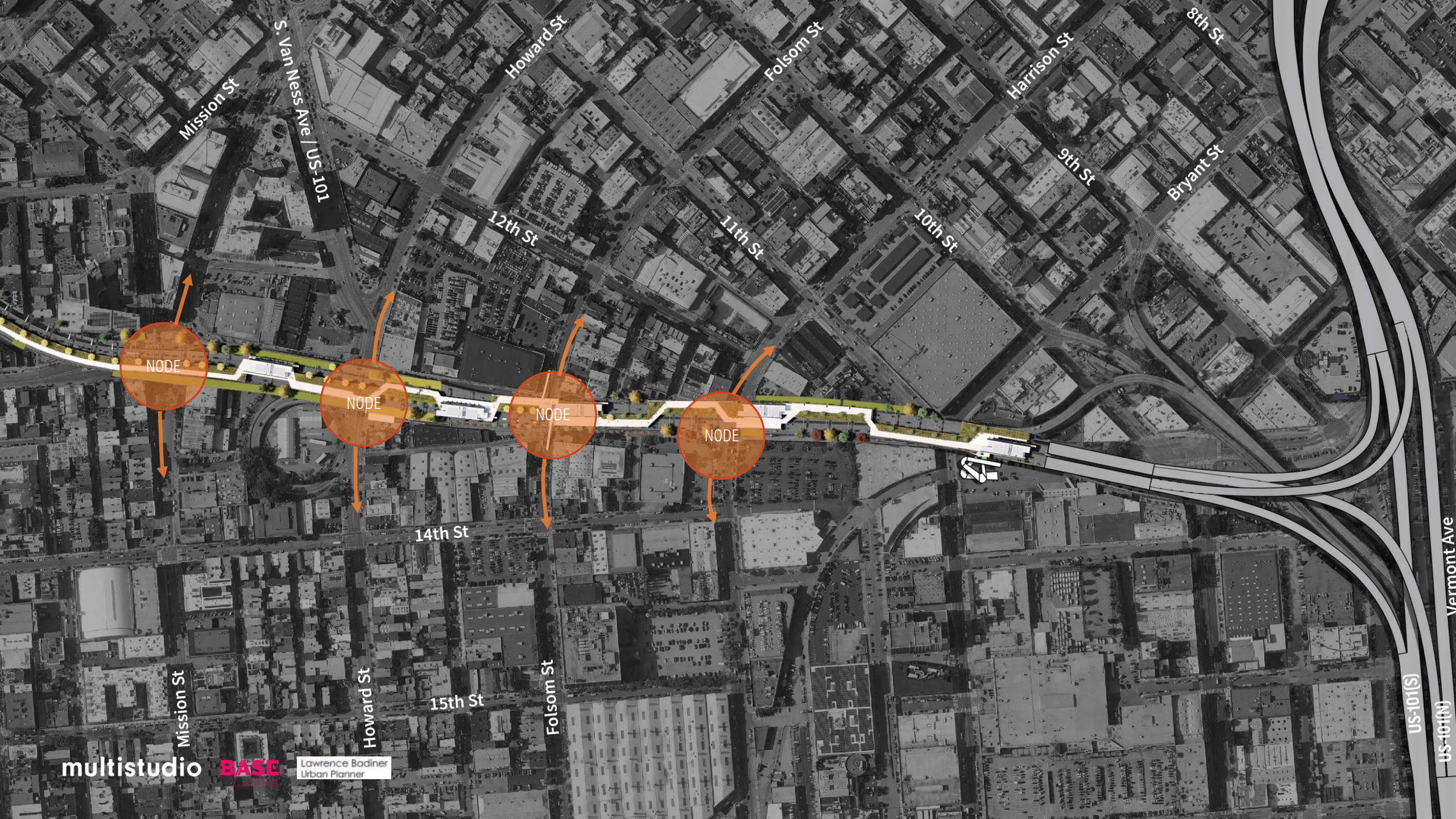




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ARCHITECTURE

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Mission St

S. Van Ness Ave / US-101

Howard St

Folsom St

Harrison St

8th St

12th St

11th St

10th St

9th St

Bryant St

NODE

NODE

NODE

NODE

14th St

Mission St

Howard St

15th St

Folsom St

US-101(S)

US-101(N)

Vermont Ave

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Transforming Freeway

50 Acres of Opportunity Sites for Mixed Use Development

Central Freeway

Potential Housing Sites

Potential Community Resources that need protection

Zeitgeist Bar

SoMa West Skatepark

Discount Builders Supply

Smart Foodservice Warehouse Stores

BMW of San Francisco

Target

1501 Harrison St (Unoccupied)

SoMa Street Food Park

Navigation Center SF

Rainbow Grocery

Office Max

Best Buy

1300 Bryant (Unoccupied)

U-Haul Self Storage

Petco

Ross Dress for Less

SPCA

Pace Plumbing Supply

Animal Care

UCSF Mission Center

Foodsco Grocery Store

Duboce Ave

Valencia St

Mission St

Howard St

Folsom St

Harrison St

Bryant St

Potrero Ave

Division St

US-101(S)

US-101(N)

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50 Acres of Opportunity Sites for Mixed Use Development

Central Freeway

US-101(S)
US-101(N)

Potential Housing Sites
Potential Community Resources that need protection

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50 Acres of Opportunity Sites for Mixed Use Development

Central Freeway

Potential Housing Sites

Potential Community Resources that need protection

Zeitgeist Bar

SoMa West Skatepark

Discount Builders Supply

Smart Foodservice Warehouse Stores

BMW of San Francisco

Target

1501 Harrison St (Unoccupied)

SoMa Street Food Park

Navigation Center SF

Rainbow Grocery

Office Max

Best Buy

1300 Bryant (Unoccupied)

U-Haul Self Storage

Petco

Ross Dress for Less

SPCA

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Bryant St

Potrero Ave

Division St

US-101(S)

US-101(N)

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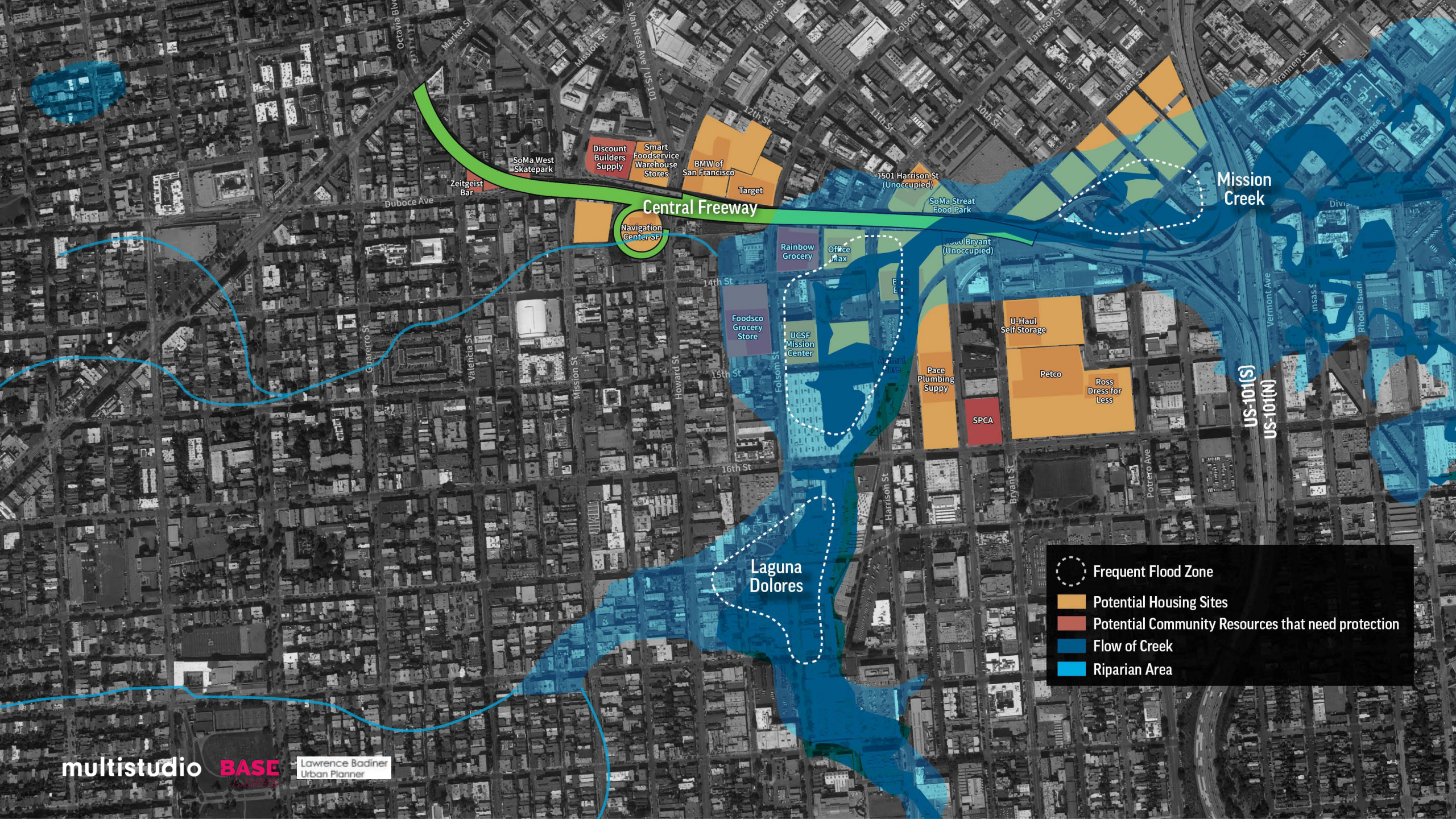
50 Acres of Opportunity Sites for Mixed Use Development

Central Freeway

US-101(S)
US-101(N)

Potential Housing Sites
Potential Community Resources that need protection

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Central Freeway

Mission Creek

Laguna Dolores

- Frequent Flood Zone
- Potential Housing Sites
- Potential Community Resources that need protection
- Flow of Creek
- Riparian Area



8,000 - 15,000 Housing Units



Hub South Neighborhood

NEMA Neighborhood Extension

Wetlands Neighborhood

Greater Height / Density North
of the Freeway

Mix Use development Under
the elevated park



Retail / PDR/ Art &
Community
Resources

Housing
Retail / PDR/ Art & Community Resources

Creekside amphitheater



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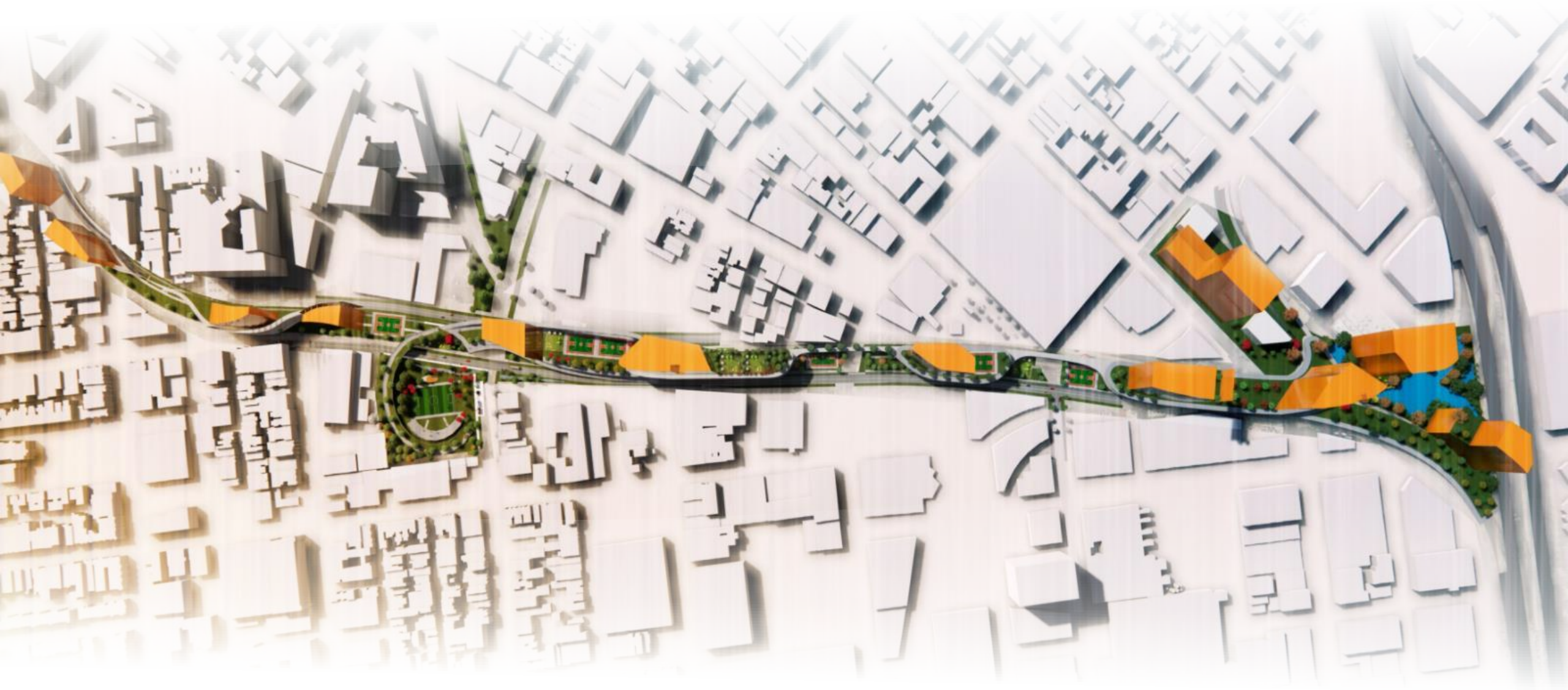
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Removing Freeway

25 Acres, 6,000 Units



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Call for Action



Next Steps

- ❑ Community Engagement
- ❑ Asset Mapping
- ❑ Anti-Displacement Strategy
- ❑ Ecological Studies
- ❑ Traffic Studies
- ❑ Tunnel feasibility
- ❑ Funding / Financing

→



Measures to tackle residential displacement	8
<i>Community land trusts</i>	10
<i>Rent control/stabilization</i>	11
<i>Just-cause eviction ordinances</i>	12
<i>Homeownership protection policies</i>	13
<i>Linkage fees</i>	14
<i>Inclusionary zoning</i>	15
<i>Community benefits agreement</i>	16
<i>Right-to-stay</i>	17
<i>Additional tools</i>	19
Measures to protect businesses and cultural spaces	20
<i>Commercial zoning regulations</i>	22
<i>Allocated arts and culture space</i>	23
<i>Lease-to-own programs</i>	24
<i>Community benefits agreements</i>	25
<i>Additional tools</i>	27

Discussion

Central Freeway

Mission Creek

Laguna Dolores

US-101(S)
US-101(N)

Legend:

- Frequent Flood Zone
- Flow of Creek
- Riparian Area