

Public Workshop #2:

Initial Findings and Proposals



04.30.2008

San Francisco Planning Department

In partnership with:

San Francisco Redevelopment Agency

Transbay Joint Powers Authority

Plan Consultants

Primary Consultant Team

EDAW (Lead; Public Realm, Urban Design, Architecture, Sustainability)

Nelson/Nygaard (Transportation)

DMJM Design (Architecture/Engineering)

Economic & Planning Systems (Financial Analysis)

Environmental Review

ESA (Lead; Shadow, Wind)

DMJM Harris (Transportation/Traffic Analysis)

Historic Preservation

Kelley & VerPlanck Historical Resources Consulting

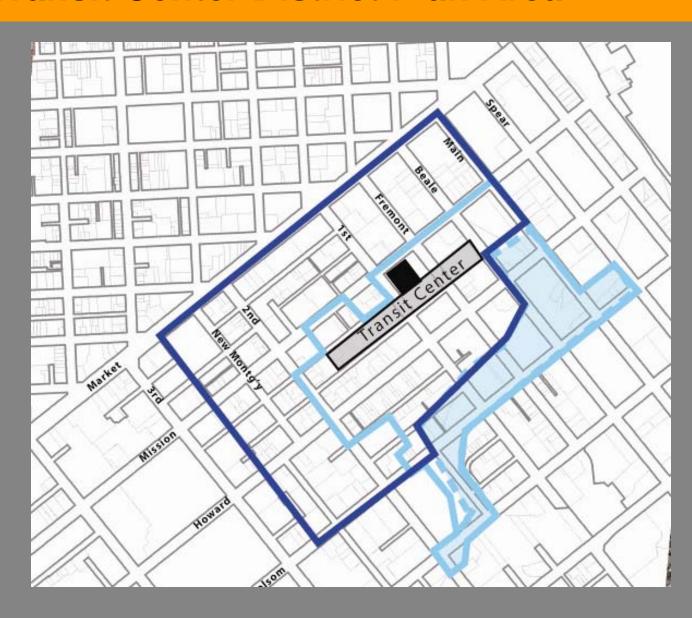


Growth & Capacity Analysis
Seifel Consulting Inc.

Transit Center District Plan Area

Private and
Public parcels
around
Transit Center,
including
Transbay
Redevelopment
Area
Zone 2





Transit Center District Plan

Objectives

- Environmentally Responsible Land Use:
 Capitalize on new major transit investment with appropriate land use response in the downtown core
- Building on the Urban Design Element and Downtown Plan, analyze:
 - Analyze the downtown form
 - Identify opportunities and set guidelines and standards to build a high-quality public realm and provide public amenities



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Generate more revenue to support the Transbay
 Transit Center/Caltrain Extension project and other public benefits.

Tonight's Topics

1. 2007-2035 Growth & Capacity Analysis

Land Use

2. Urban Form
Form/Skyline/Views
Shadow
Historic Resources





3. Streets and Open Spaces

Downtown Growth Projections: Demand/Capacity Analysis



Regional Sustainability

Downtown Growth and Capacity Analysis

What are the forecasts for regional, citywide and downtown growth in the next 25 years?

What is the capacity of the existing zoning?

What role does the Downtown and Transit Center District have in absorbing future growth?



What are alternative scenarios of land use balance?

Regional and SF Growth 2007-2035

Two Growth Projections Analyzed

Baseline (Average of Moody's and REMI)

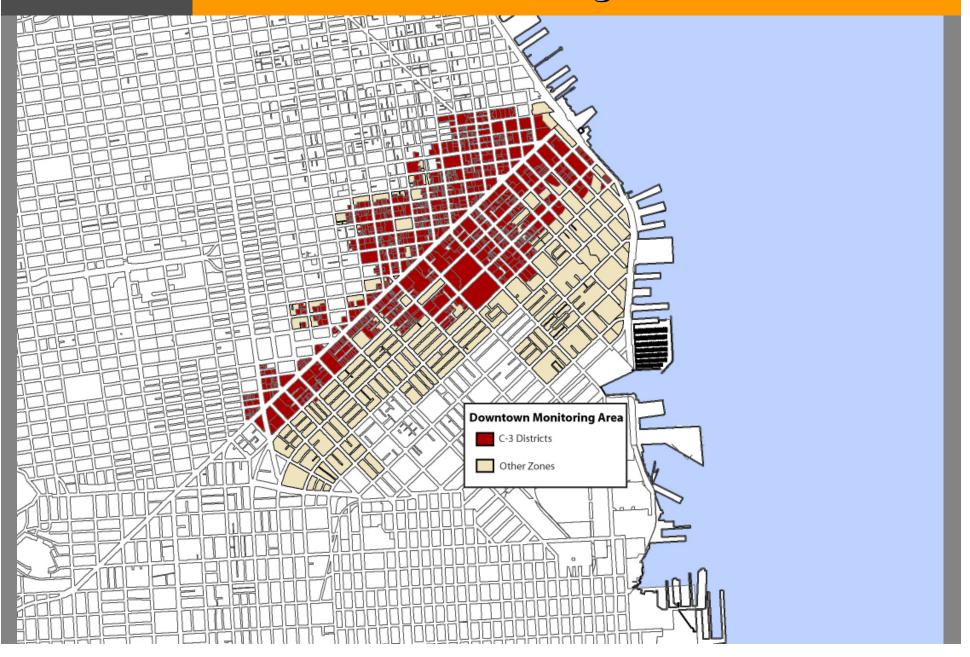
- Generally conservative, trend based on historic local patterns
- Focus on cost of doing business and cost of living
- SF-only model (not based on regional model)
- No consideration of regional policy objectives or new factors (e.g. climate change initiatives, change in transportation patterns, economic or housing policy)

Smart Growth (ABAG 2007)

- Regional model of total Bay Area growth with allocation of jobs and population to cities
- Policy assumption of directing growth to urbanized areas with transit infrastructure
- Assumes San Francisco maintains present 16% of Bay Area jobs



Downtown Monitoring area



Downtown's Share of Growth 2007-2035

Baseline Smart Growth

Net Additional Office Space:* 12.4 million sf 23.5 million sf

Net Additional Housing Units:** 8,580 11,740

*Assumes capture rate consistent with Downtown's current 73% share of citywide office space

**Assumes capture rate consistent with Downtown's 21% share of current citywide pipeline and programmed units (note: Downtown has approx. 6% of

City's existing housing units)



Downtown Pipeline and Unmet Demand

Demand – (Approved + Under Construction + Programmed) = *Unmet Demand*

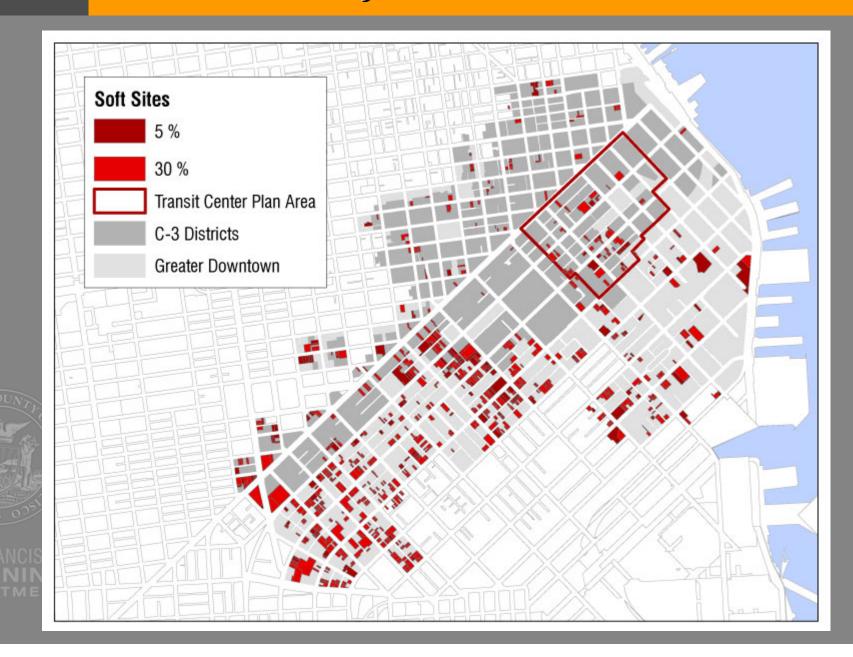
Baseline Projection: Demand and Future Supply, 2007-2035 Downtown San Francisco

Development Type	Downtown	Future Downtown Supply			Unmet
	Demand	Approved or	Programmed	Total	Demand
		Under Construction			
Office Space (GSF)	12,430,000 GSF	1,458,000 GSF	1,135,000 GSF	2,593,000 GSF	9,837,000 GSF
Housing (Units)	8,580 Units	5,840 Units	3,470 Units	9,310 Units	0
Housing (GSF)	10,296,000 GSF	7,008,000 GSF	4,164,000 GSF	11,172,000 GSF	0
Total Office/Residential GSF	22,726,000 GSF	8,466,000 GSF	5,299,000 GSF	13,765,000 GSF	9,837,000 GSF

Smart Growth Projection: Demand and Future Supply, 2007-2035 Downtown San Francisco

Development Type	Downtown	Future	Unmet		
	Demand	Approved or	Programmed	Total	Demand
		Under Construction			
Office Space (GSF)	23,497,000 GSF	1,458,000 GSF	1,135,000 GSF	2,593,000 GSF	20,904,000 GSF
Housing (Units)	11,740 Units	5,840 Units	3,470 Units	9,310 Units	2,430 Units
Housing (GSF)	14,088,000 GSF	7,008,000 GSF	4,164,000 GSF	11,172,000 GSF	2,916,000 GSF
Total Office/Residential GSF	37,585,000 GSF	8,466,000 GSF	5,299,000 GSF	13,765,000 GSF	23,820,000 GSF

Soft Site Analysis



Downtown Capacity

Total Downtown Area New Development Capacity for All Uses (based on existing zoning and proposed Eastern Neighborhoods zoning where applicable)

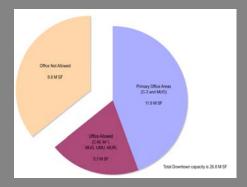
26.8 million gross square feet

Primary Office Zones (100% office space permitted)
C-3, MUO, SSO
11.9 million gsf

Zones where some offices permitted (approx. 25% office space permitted)
C-M, M-1, MUG, UMU, MUR
5.3 million gsf

Zones where offices generally not Permitted
SLR, SLI, SPD, RED
9.6 million gsf





Downtown Capacity: Land Use Mix

Three Capacity Scenarios analyzed based on alternative balances between two primary uses: office and residential space

Scenario 1 (Maximum Office Capacity):

100% of Primary Office Area capacity devoted to offices.

Scenario 2 (Mixed Development)

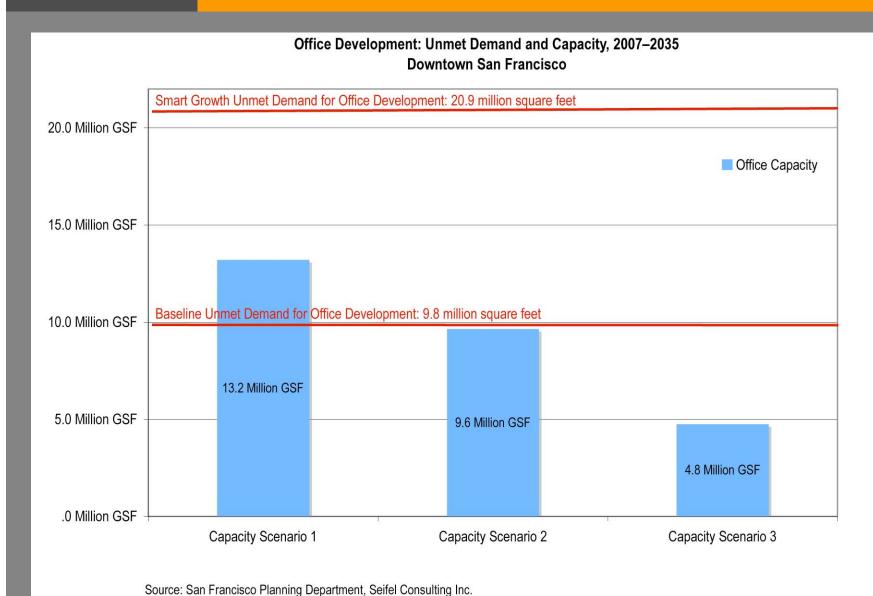
70% of Primary Office Area capacity devoted to offices.

Scenario 3 (Maximum Residential)

Assumes 100 percent of unmet Downtown residential demand is absorbed, with remaining space allocated to offices.

Capacity						
Scenario 1:	Scenario 2:	Scenario 3:				
Maximum Office	Mixed Development	Maximum Residential				
13,208,000 GSF	9,645,000 GSF	4,751,000 GSF				
6,850 Units	9,820 Units	13,900 Units				
<u>8,219,000 GSF</u>	11,782,000 GSF	16,676,000 GSF				
21,427,000 GSF	21,427,000 GSF	21,427,000 GSF				
5,357,000 GSF	5,357,000 GSF	5,357,000 GSF				
26,784,000 GSF	26,784,000 GSF	26,784,000 GSF				
	Maximum Office 13,208,000 GSF 6,850 Units 8,219,000 GSF 21,427,000 GSF 5,357,000 GSF	Scenario 1: Scenario 2: Maximum Office Mixed Development 13,208,000 GSF 9,645,000 GSF 6,850 Units 9,820 Units 8,219,000 GSF 11,782,000 GSF 21,427,000 GSF 21,427,000 GSF 5,357,000 GSF 5,357,000 GSF				

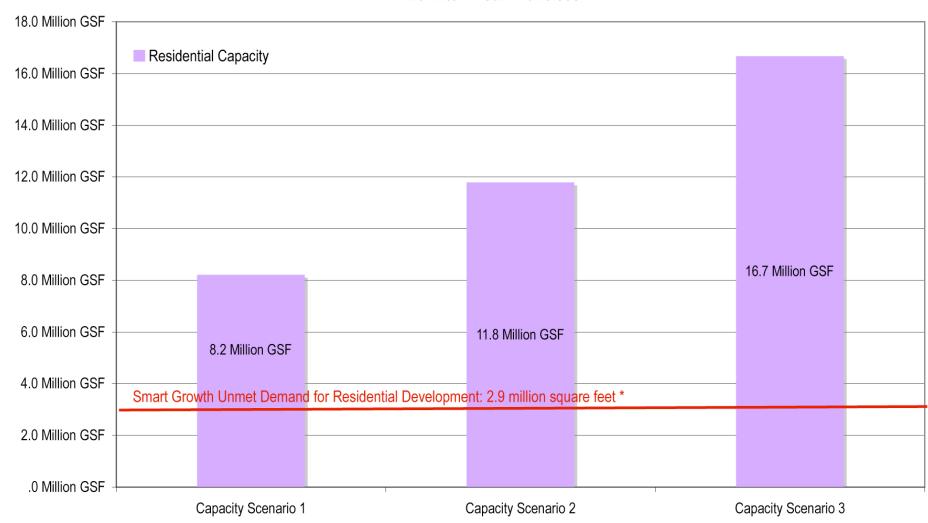
Capacity vs Growth Demand: Office



Capacity vs Growth Demand: Housing

Residential Development: Unmet Demand and Capacity, 2007–2035

Downtown San Francisco



*Under the Baseline growth scenario, there is no unmet demand for residential development within the Downtown. Source: San Francisco Planning Department, Seifel Consulting Inc.

Role of Downtown

Downtown is the City's primary job center:

- Regional hub of transit network
- Protection of neighborhoods
- Economic efficiency, creativity, diversity

Other goals:

- 24-hour activity
- Housing within walking distance of jobs
- Cultural and retail center of the region





Commute Patterns

Commute Mode Shares

	Core Downtown SF	SF Other	Downtown Oakland	Rest of Bay Area
Transit Mode	77%	40%	25%	5%
Carpool	8%	10%	15%	11%
Drive Alone	9%	35%	55%	80%
Walk/Bike	6%	15%	5%	4%









Greenhouse Gas Emissions

Estimated CO2 Emissions for 10,000 Jobs by Location

Core Downtown SF			SF	SF Other		Downtown Oakland		Rest of Bay Area	
	<u>Workers</u>	<u>CO2</u>	Workers	<u>CO2</u>	Workers	<u>CO2</u>	Workers	<u>CO2</u>	
Transit	7,700	5,004	4,000	2,599	2,500	1,625	500	325	
Carpool	800	1,194	1,000	1,492	1,500	2,239	1,100	1,642	
Drive Alone	900	2,686	3,500	10,447	5,500	16,416	8,000	23,878	
Walk/Bike	600	0	1,500	0	500	0	400	0	
Total CO2									

Emissions
(Metric Tonnes/Year)

8,884

14,538

20,280

25,845

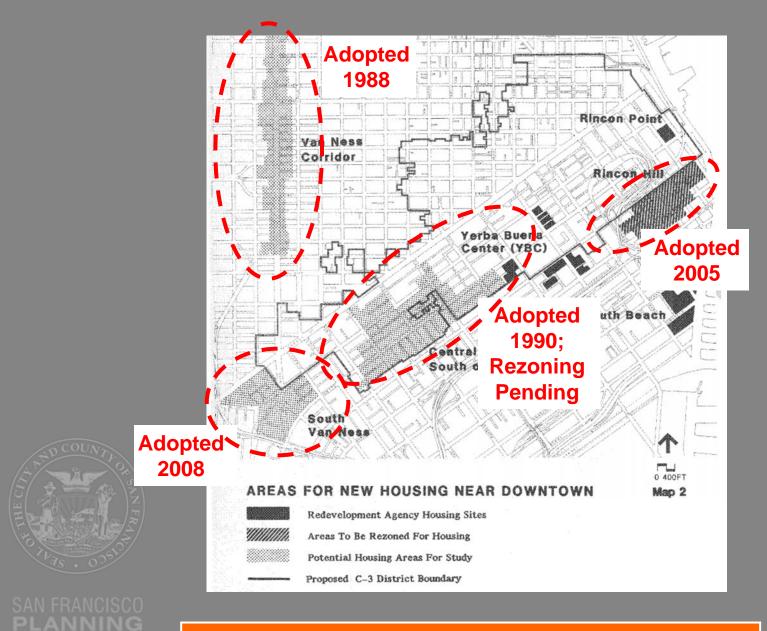


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Downtown Plan: Housing

Transbay Zone 1 and Rincon Hill

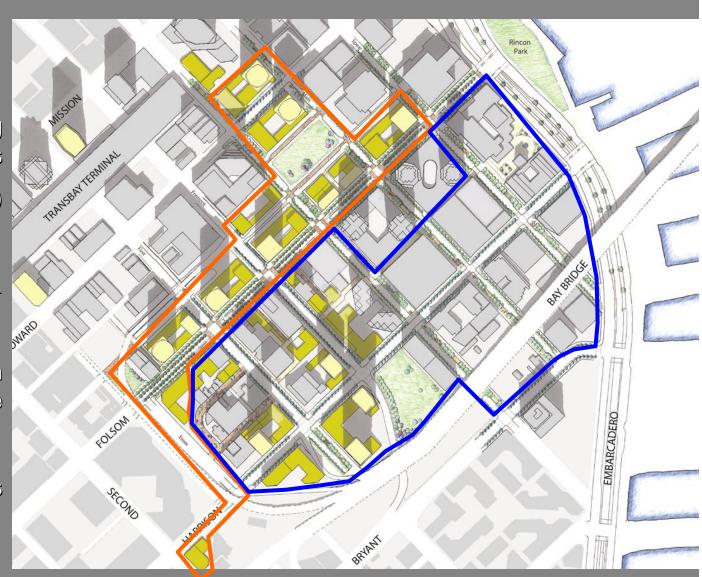
7,000+ new housing units

(3,200 units in Zone 1)

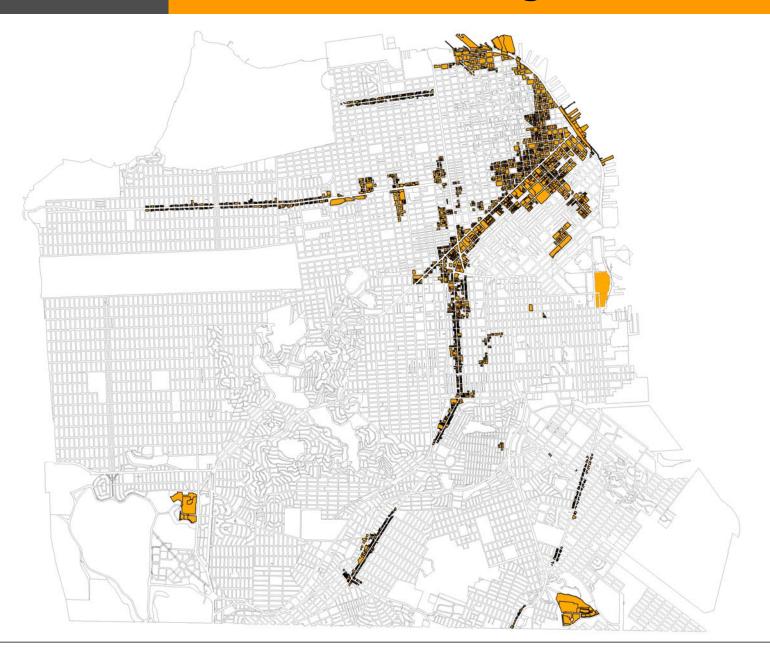
Retail along Folsom St.

Streetscape and Open Space

Public Benefits

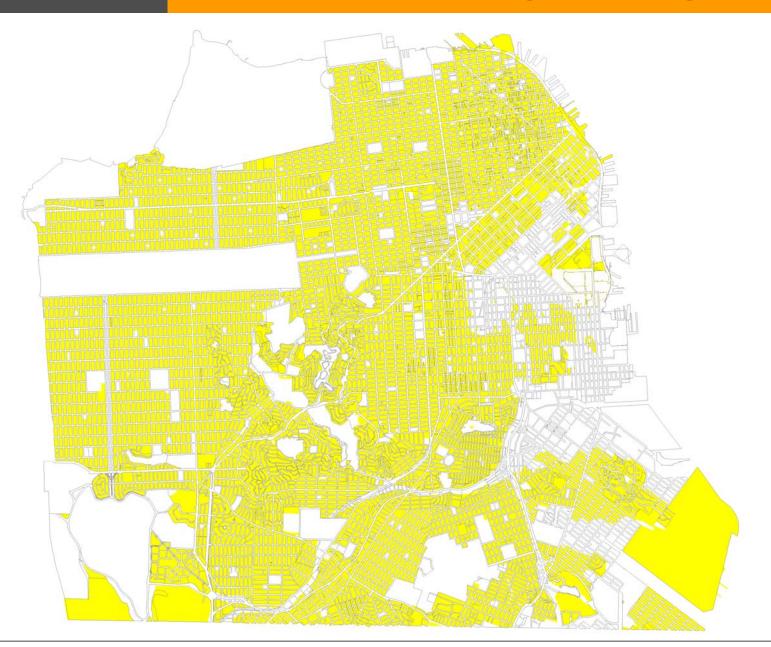


Districts Permitting Offices



Approx.
12.5% of
NonPubliclyOwned
City
Lot Area

Districts Permitting Housing



Approx.
79% of
NonPubliclyOwned
City
Lot Area

Citywide Housing Capacity

Citywide Housing Capacity: approx. 90,000 units

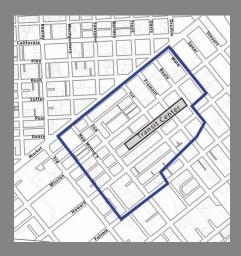
	Baseline*	Smart Growth**
2007-2035 Forecast Demand	44.470	50.040
Net Additional Units:	41,173	56,310



Proposed Land Use Controls

- Reserve bulk of remaining space in core Transit District to ensure that space is available for downtown job growth
- Limit amount of non-commercial uses on major opportunity sites
- Seek to achieve an overall ratio in new construction in the district of 70% office/30% non-office (e.g. residential, hotel, cultural)
- In major new construction sites (e.g. new construction projects with greater than 7:1 FAR), require at least 3 square feet of commercial space for every 1 s.f. of residential, hotel, or cultural space.





Urban Form



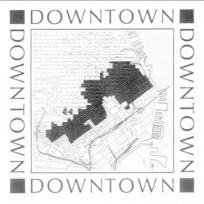
Urban Form Factors

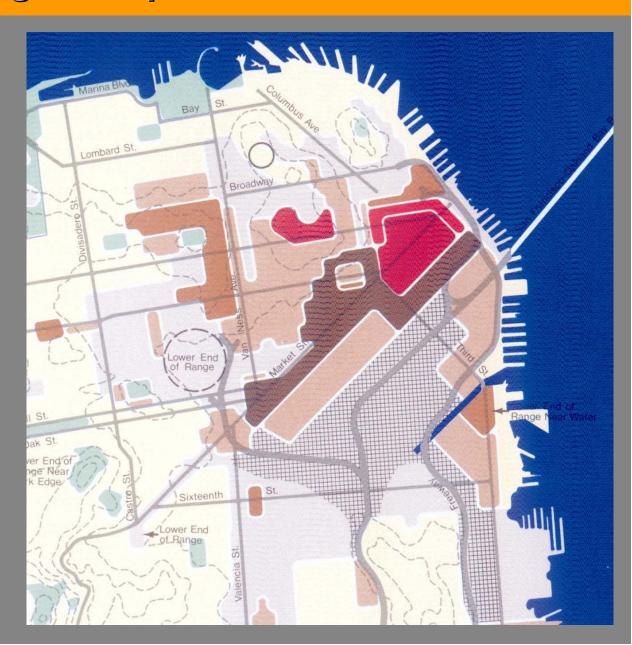
- Urban Form Principles/Aesthetics/Skyline/View Analysis
- Shadows
- Historic Resources/District Character



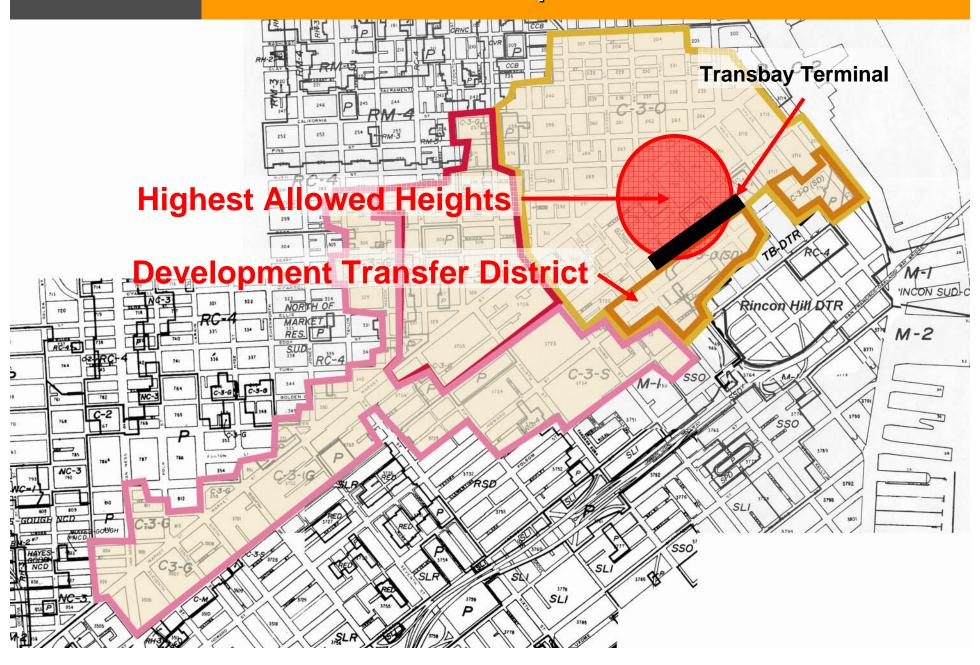
Guiding Principles



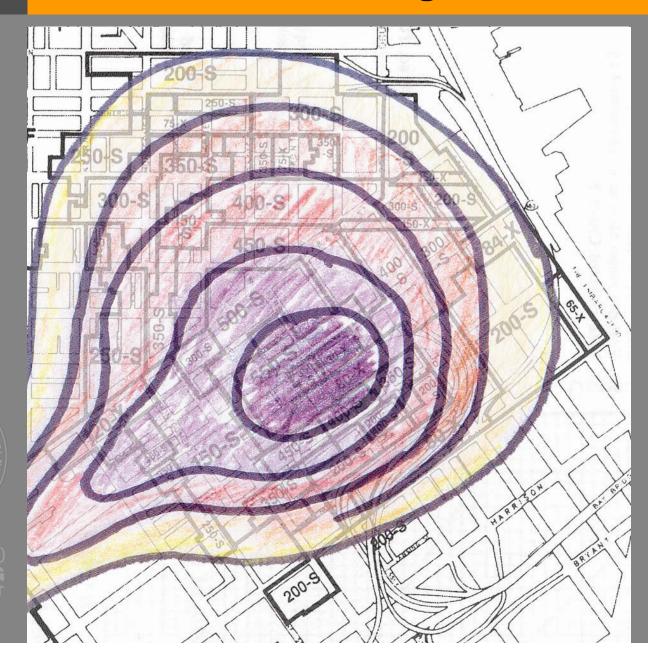




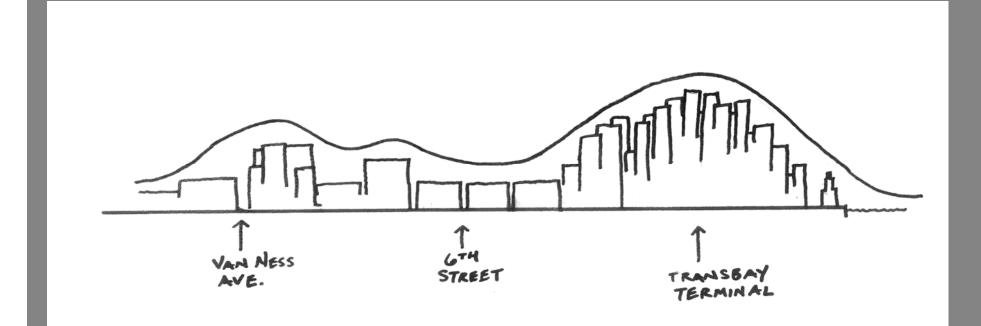
Downtown Plan: Emphasis on Transit Center



Downtown Plan: Heights



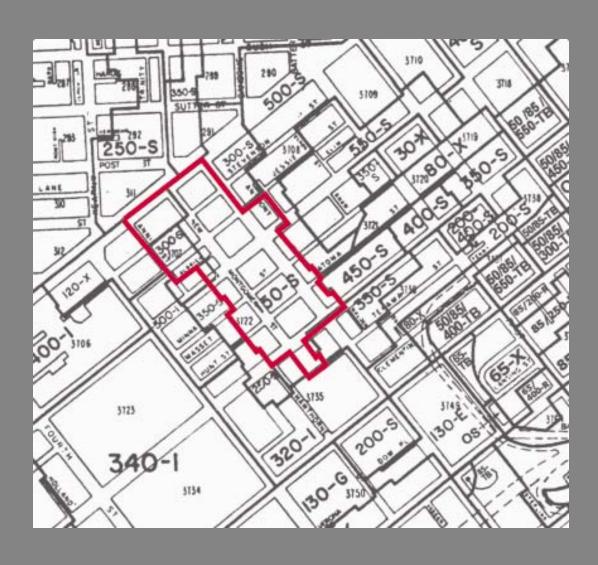
Downtown Plan: Heights



MARKET ST. SPINE

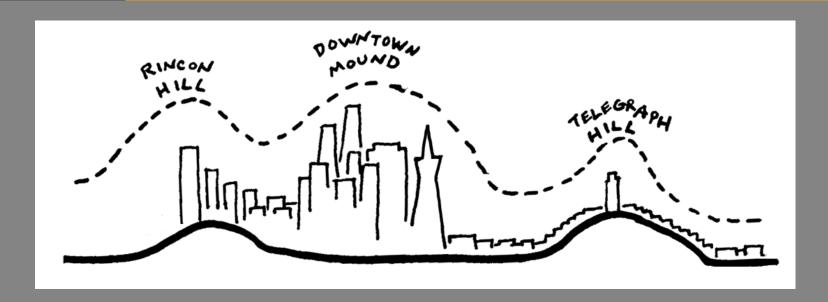
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New Montgomery-2nd St Conservation District





Skyline: Topography of Hills and Valleys

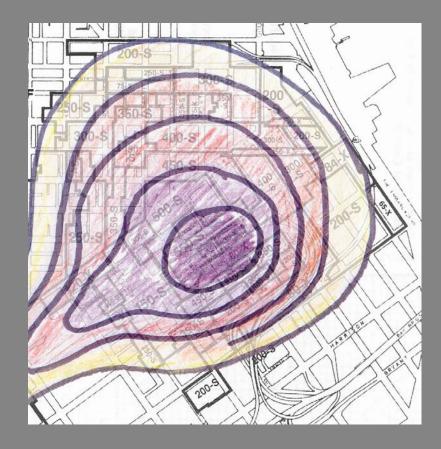






Urban Form Principles

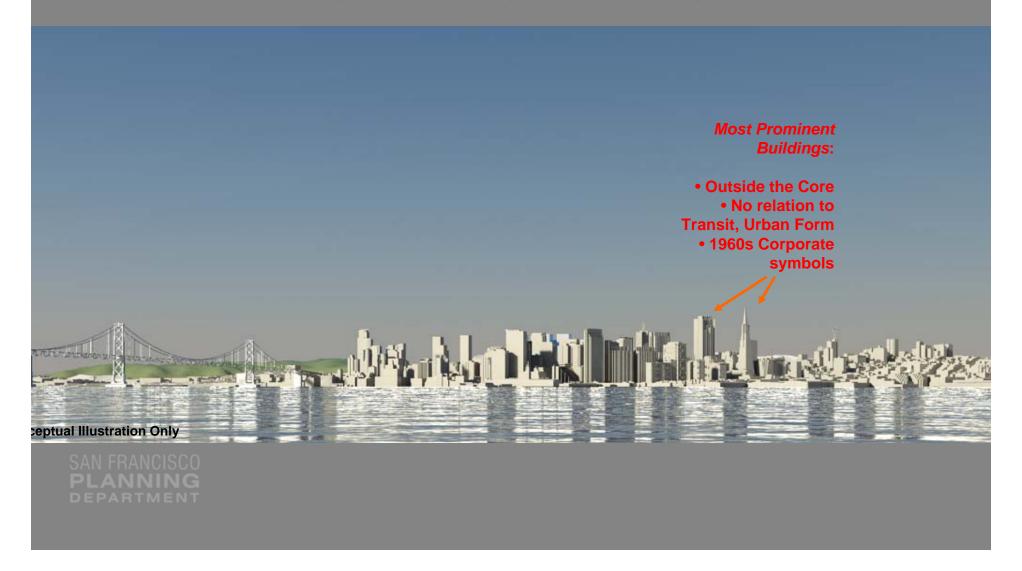
Maintain and accentuate the current conception of the downtown form, with the apex of the "mound" at the Transbay Transit Center and tapering outwards in all directions





Urban Form Principles

The Transit Tower should be the tallest and most prominent building at the "crown" of the downtown core



The Transit Tower should be the tallest and most prominent building at the "crown" of the downtown core

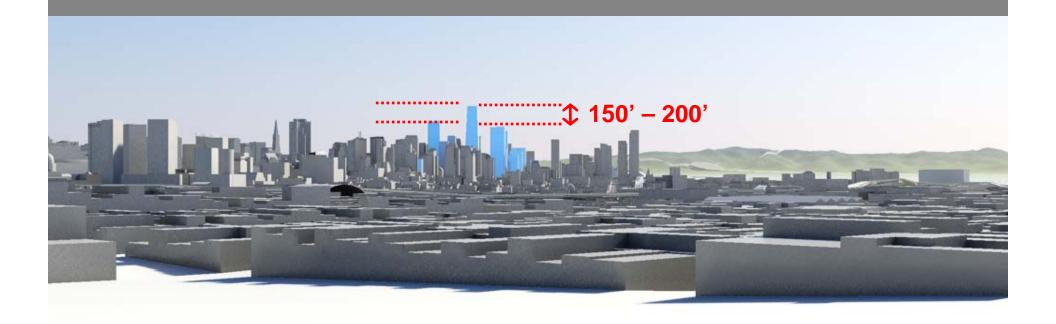


A limited number of widely spaced tall buildings near the Transit Tower should rise above the dense part of the downtown core to transition the skyline and give the Tower balance.

These tall buildings should be spaced sufficiently to allow sky between them as much as possible, but grouped close enough to create a coherent form.



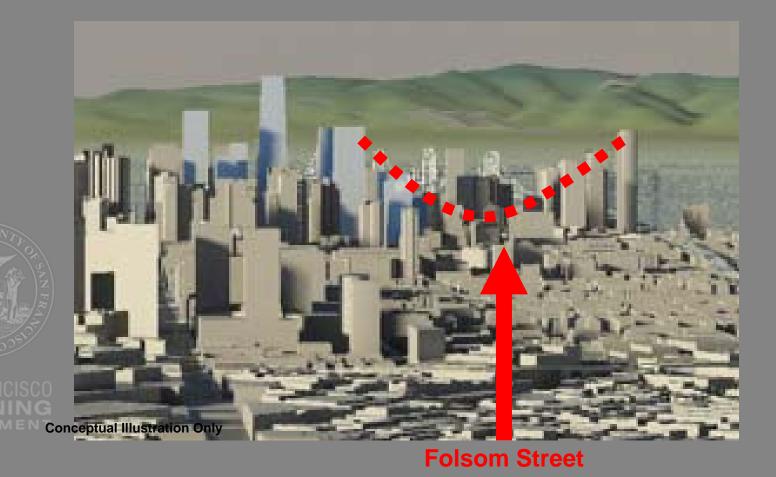
Nearby tall buildings should step down in increments of at least 150'-200' from the Transit Tower



ceptual Illustration Only

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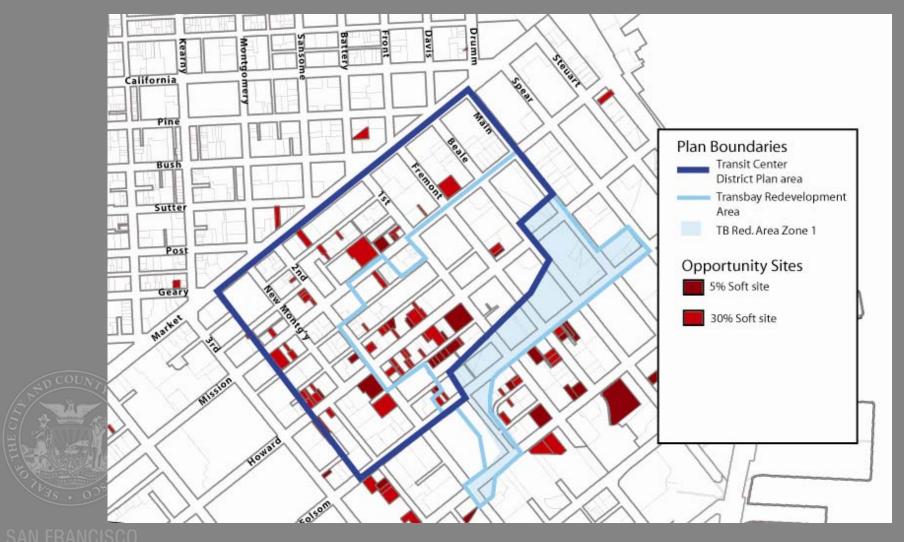
Transition heights down from Howard Street to Folsom Street and maintain a lower "saddle" to clearly distinguish the downtown form the Rincon Hill form. This saddle permits views from the Bay Bridge through to the City's hills beyond and from the hills to the Bay.



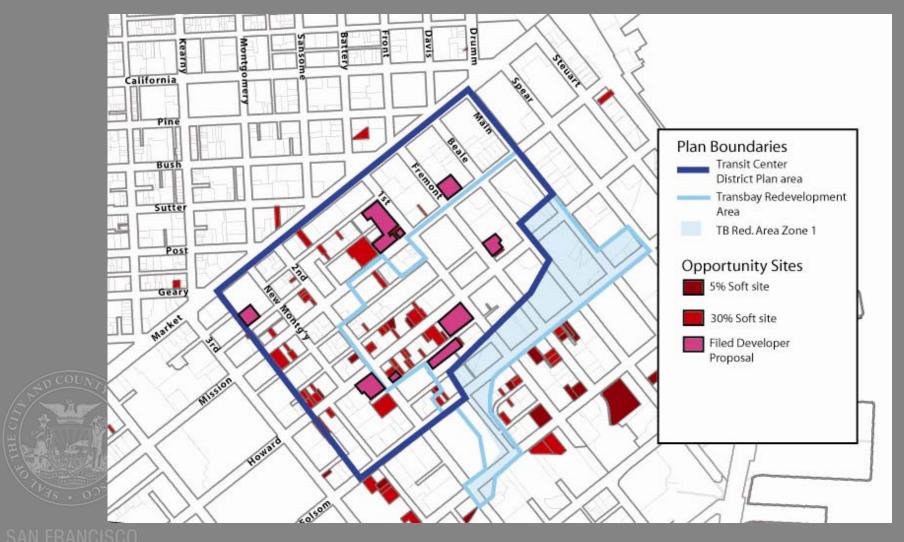
Transition heights down to adjacent areas, with particularly attention on the transitions to the southwest and west in the lower scale south of Market areas.



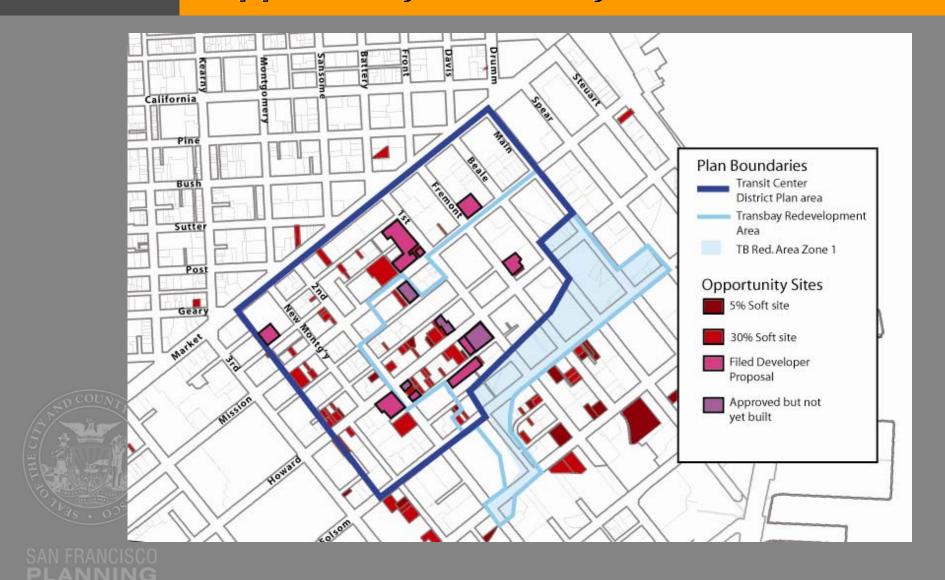


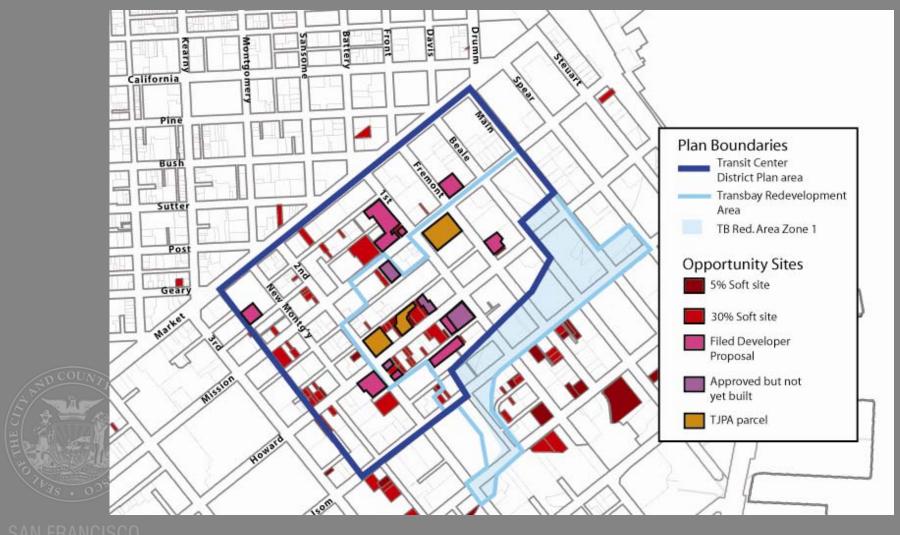


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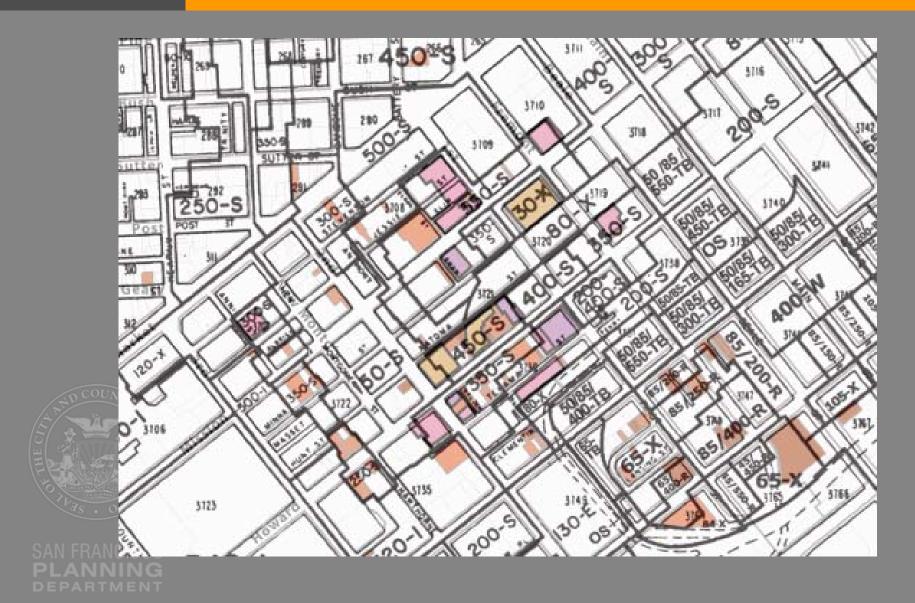
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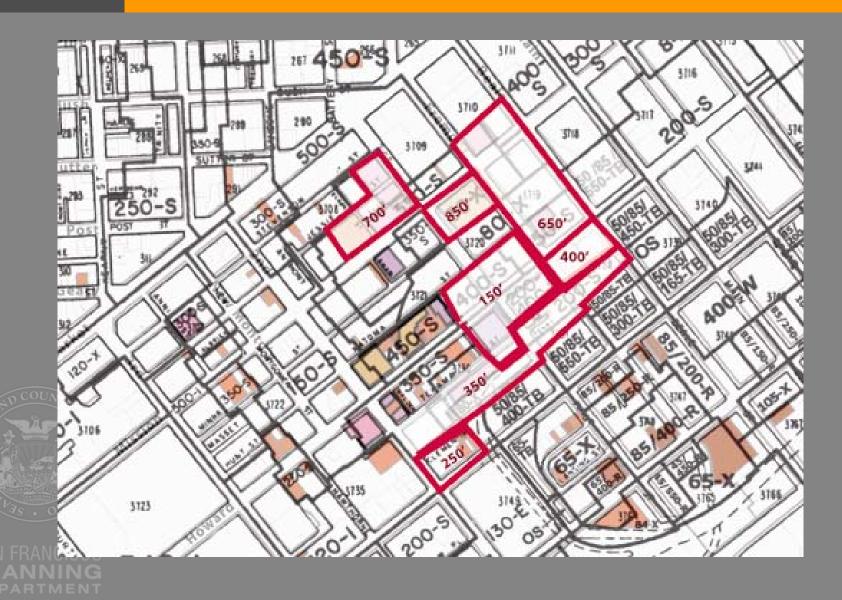


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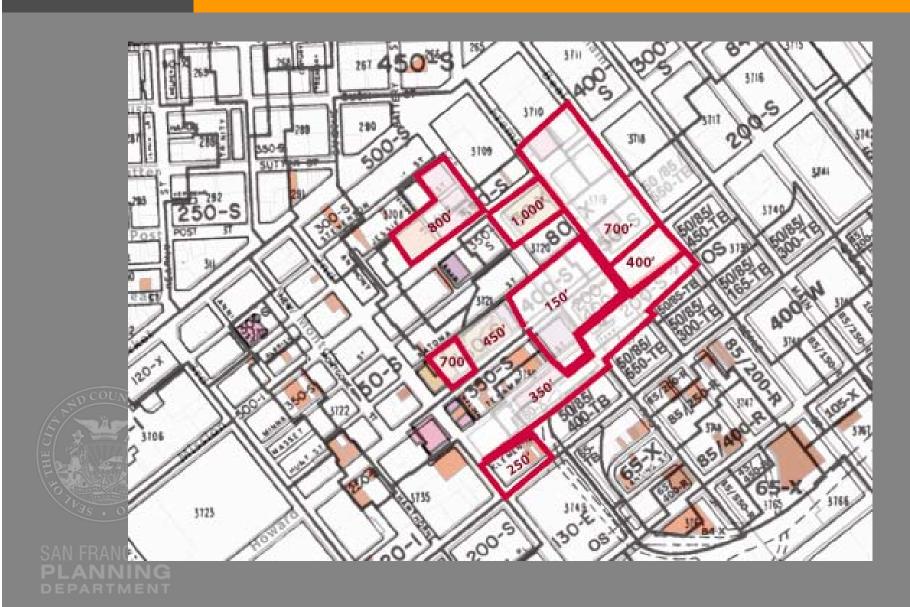
Existing Zoning



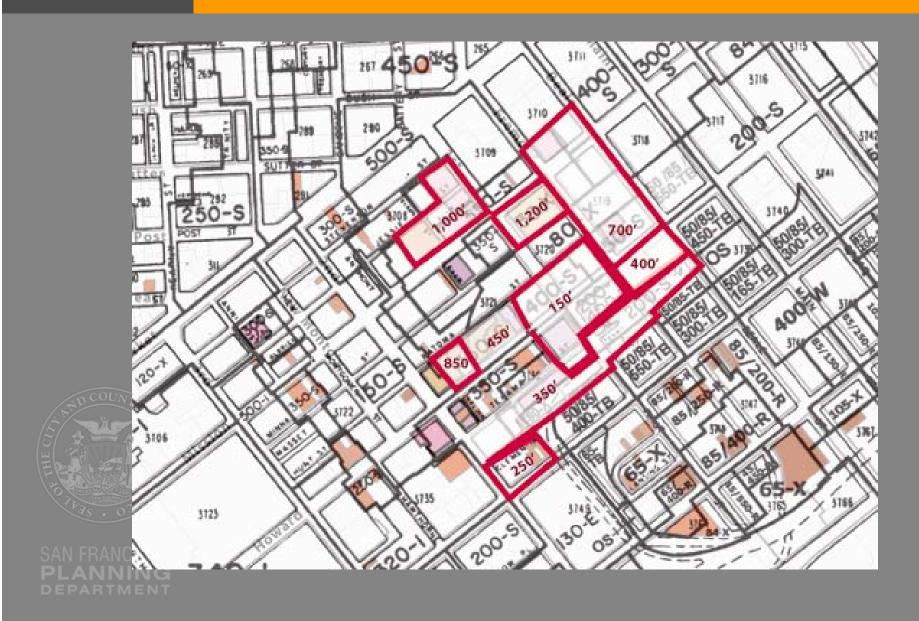
Scenario 850' Transit Tower



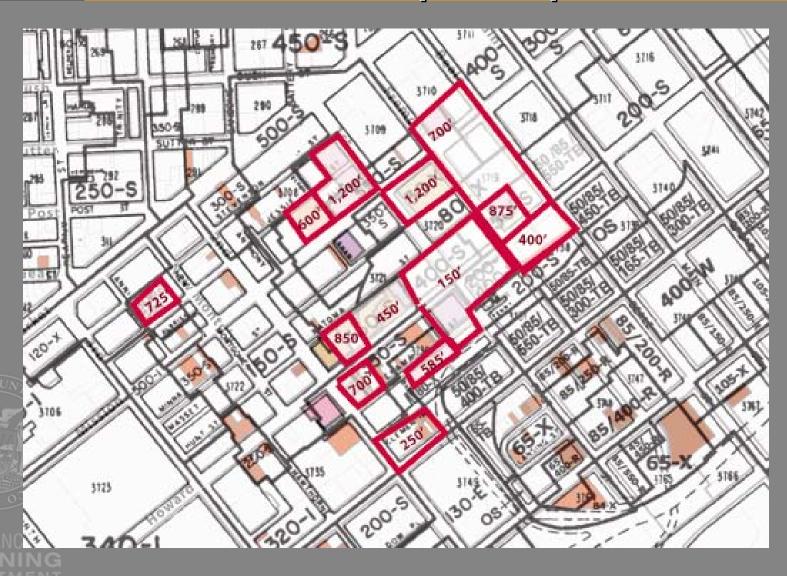
Scenario 1,000' Transit Tower



Scenario 1,200' Transit Tower



Scenario 1,200' Transit Tower + Maximum Developer Proposals



3-D Urban Form/View Analysis

View/Skyline Simulations from:

Twin Peaks Corona Heights Park

Potrero Hill Hwy 101 north

Golden Gate Bridge Bay Bridge

Dolores Park Alamo Square

Bay/Treasure Island Pier 7

Union Square Columbus Ave

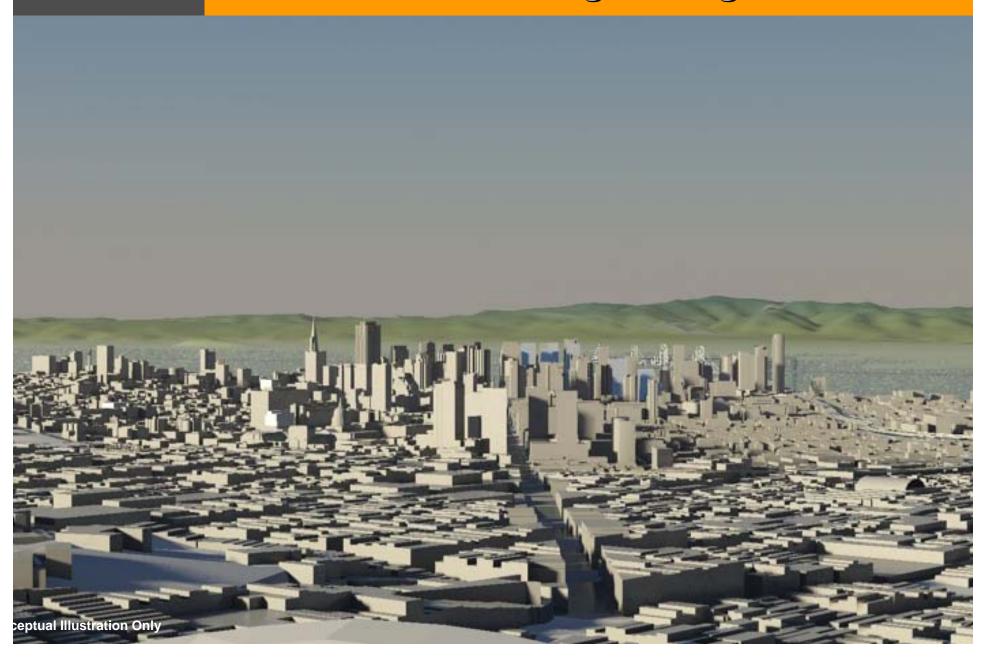
Post Street Bay Bridge West Approach

South of Market streets (2nd Street, Howard Street)

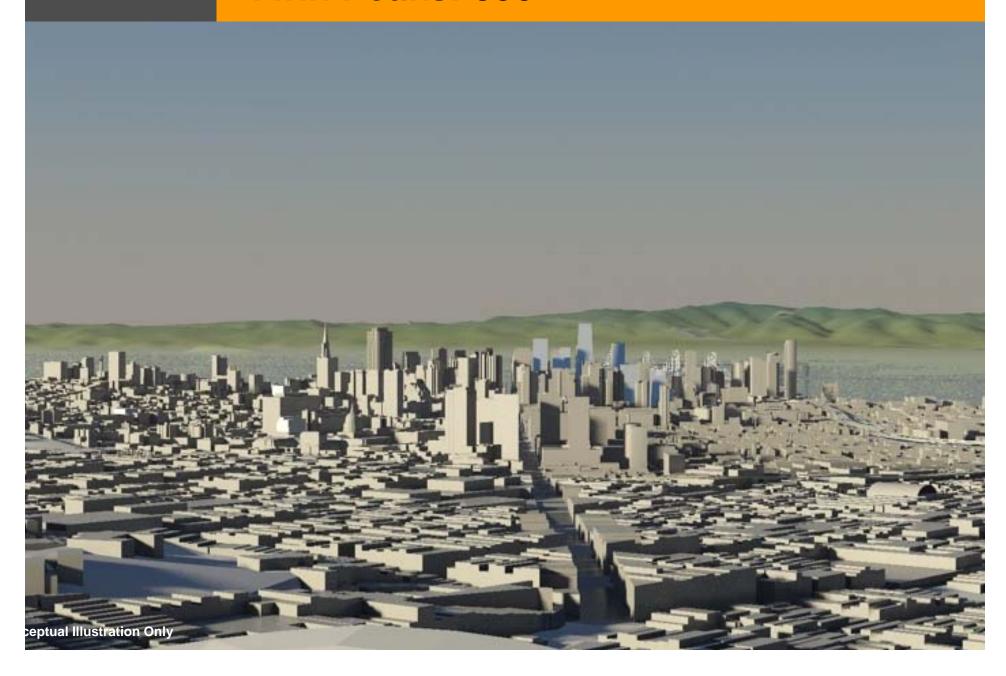




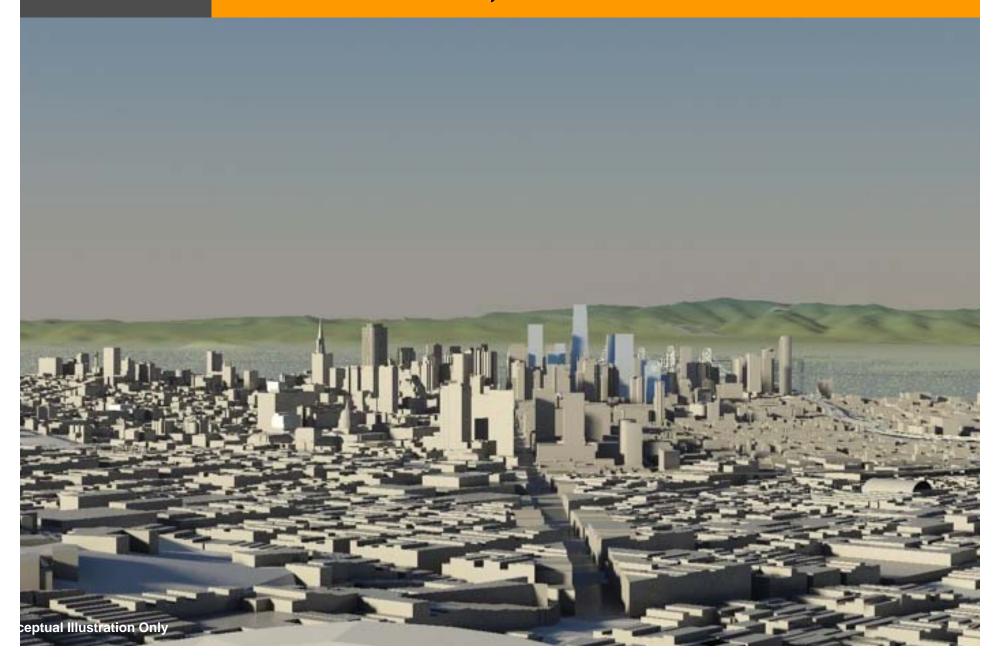
Twin Peaks: Existing Zoning



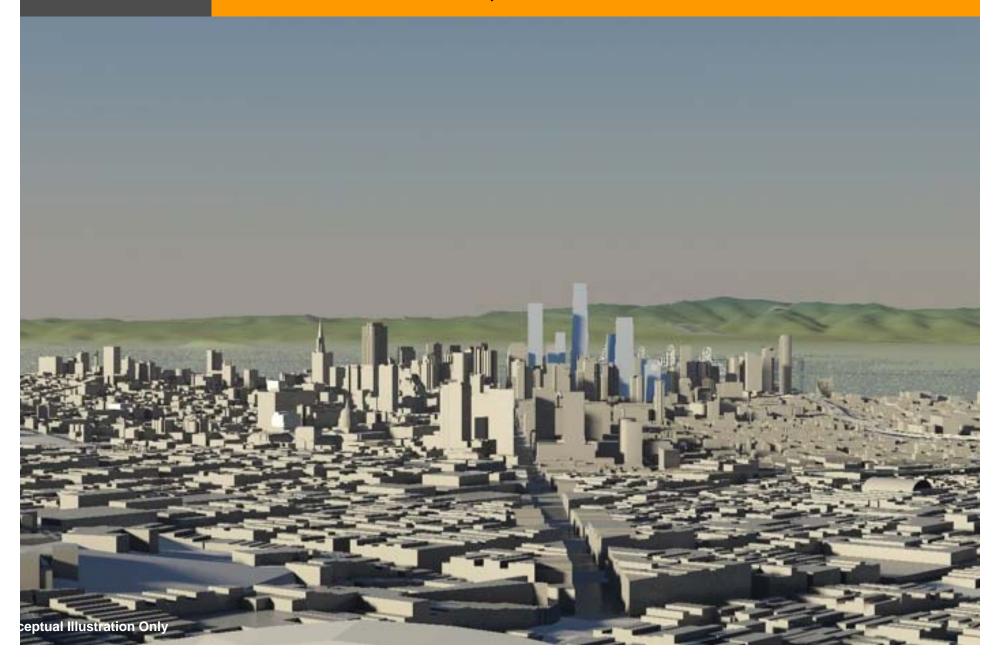
Twin Peaks: 850'



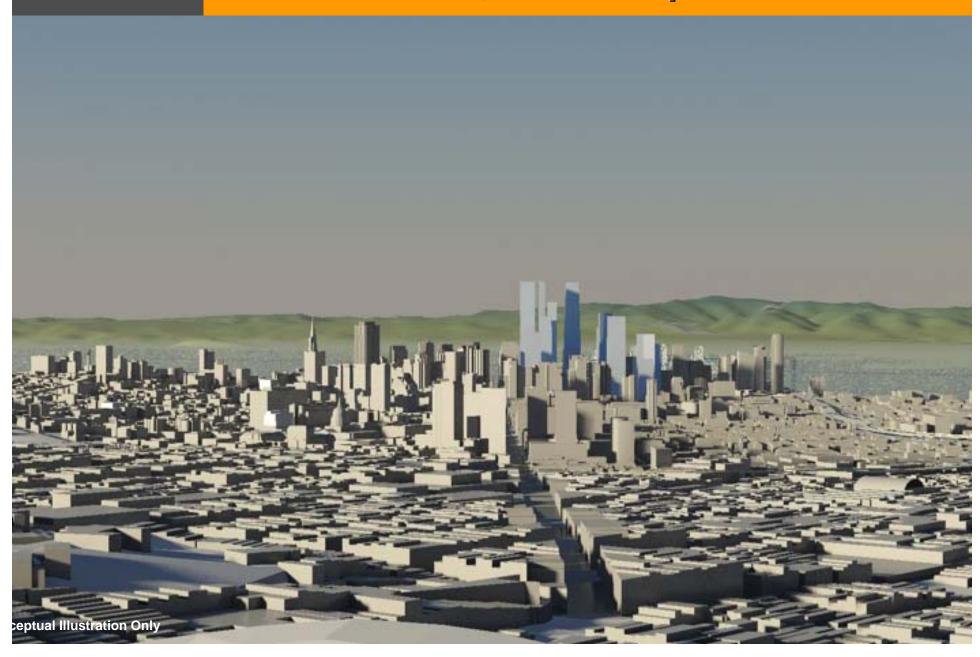
Twin Peaks: 1,000'



Twin Peaks: 1,200'



Twin Peaks: 1,200' + Proposals



Dolores Park: Existing Zoning



Dolores Park: 850'



Dolores Park: 1,000'



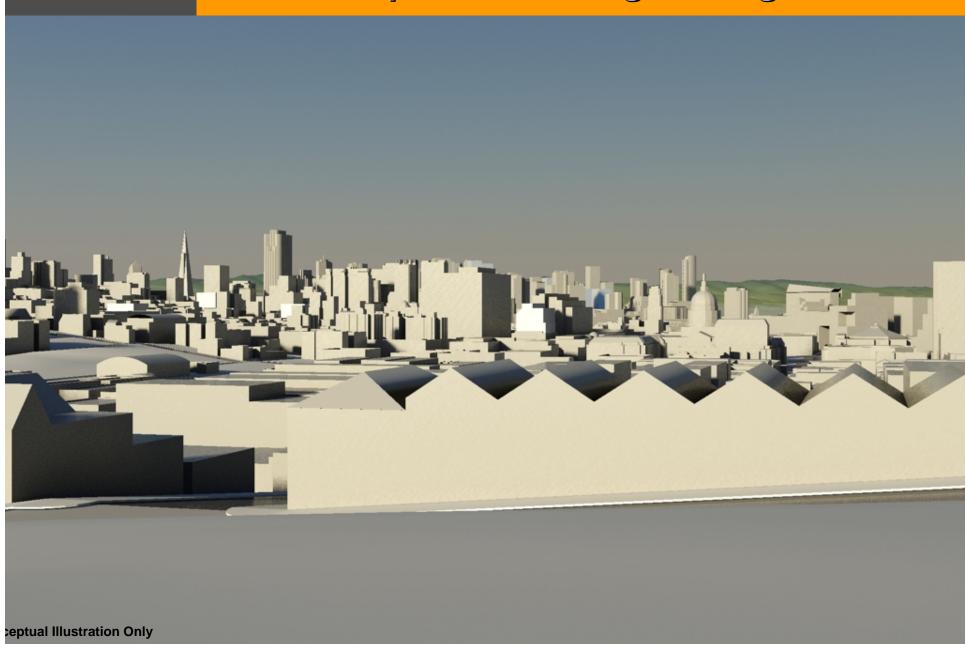
Dolores Park: 1,200'



Dolores Park: 1,200' + Proposals



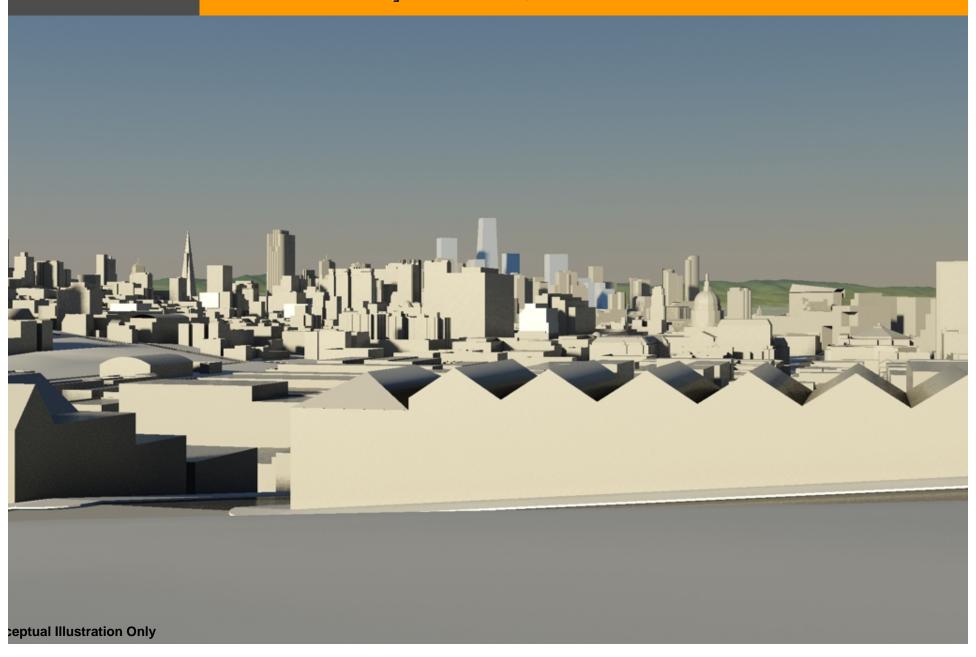
Alamo Square: Existing Zoning



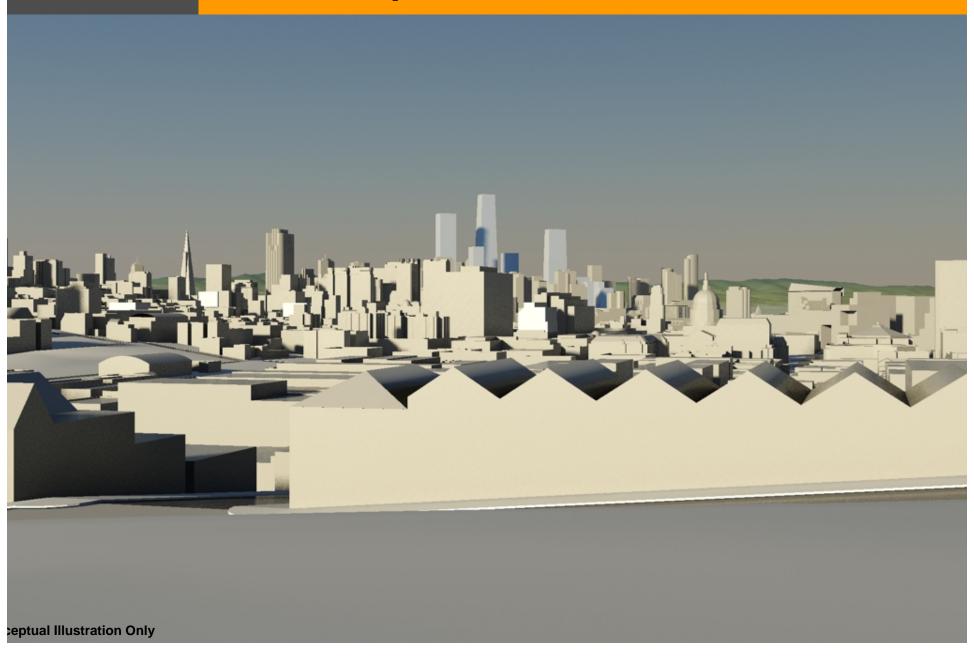
Alamo Square: 850'



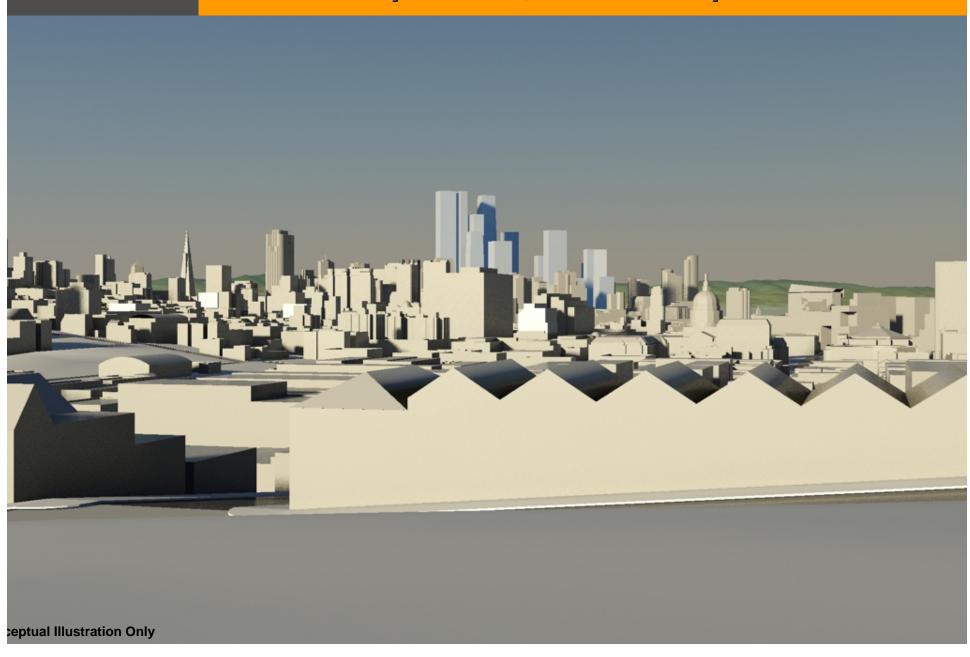
Alamo Square: 1,000°



Alamo Square: 1,200'



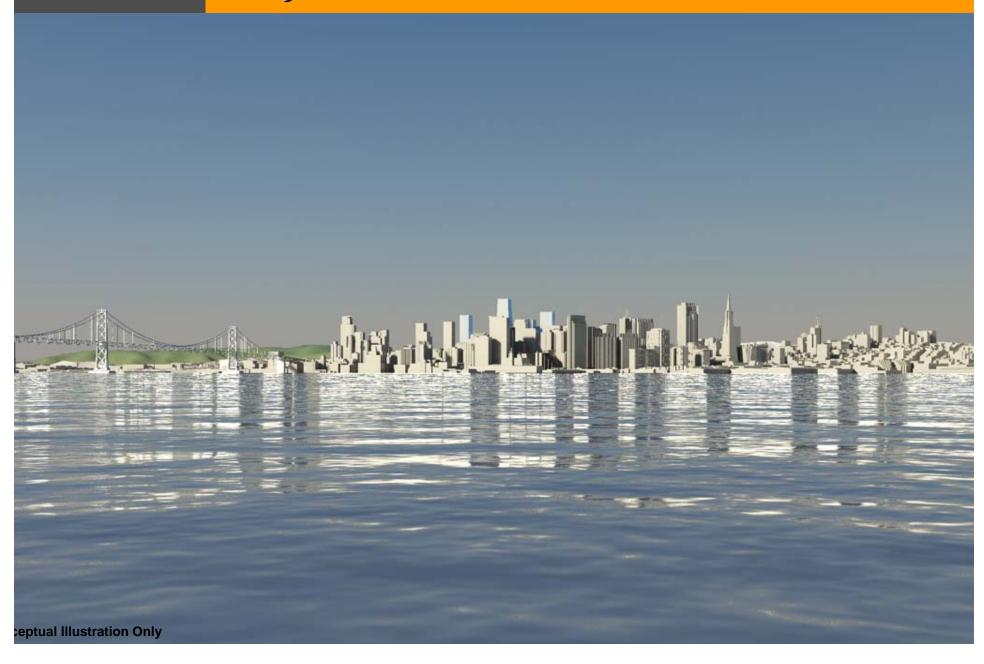
Alamo Square: 1,200' + Proposals



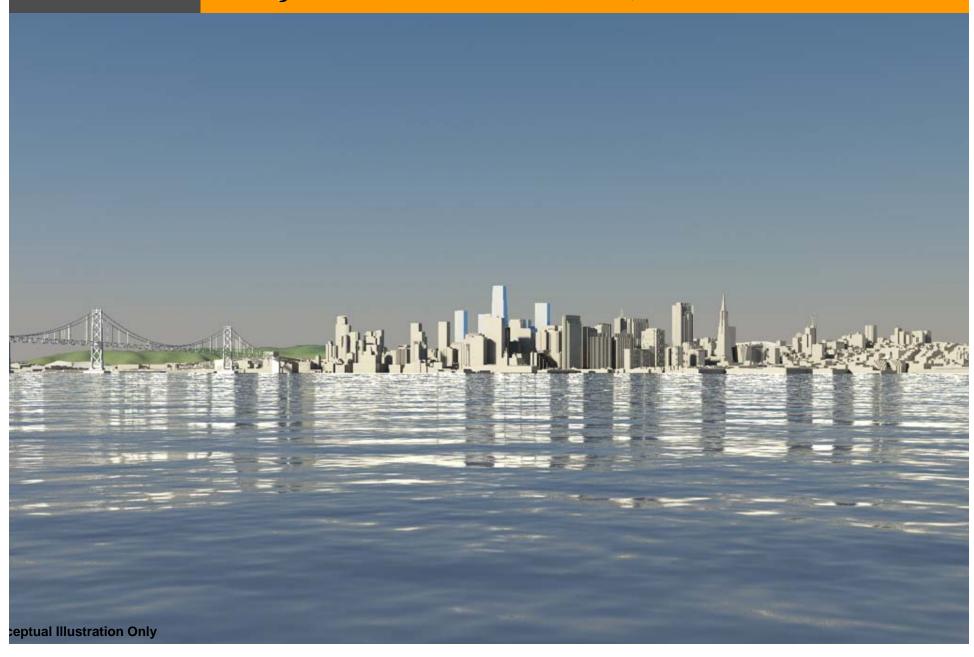
Bay/Treasure Island: Existing Zoning



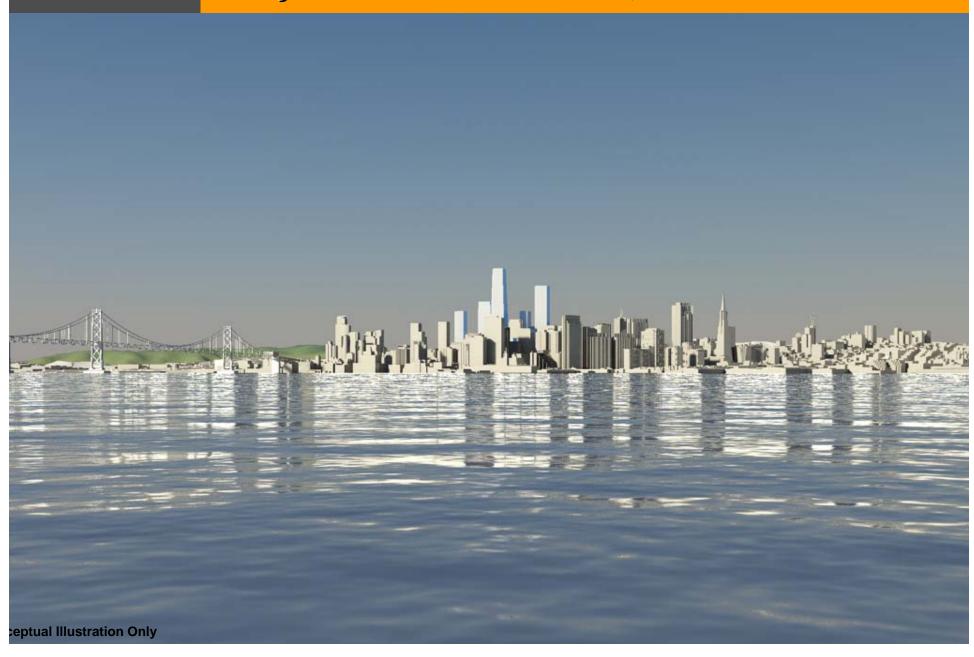
Bay/Treasure Island: 850'



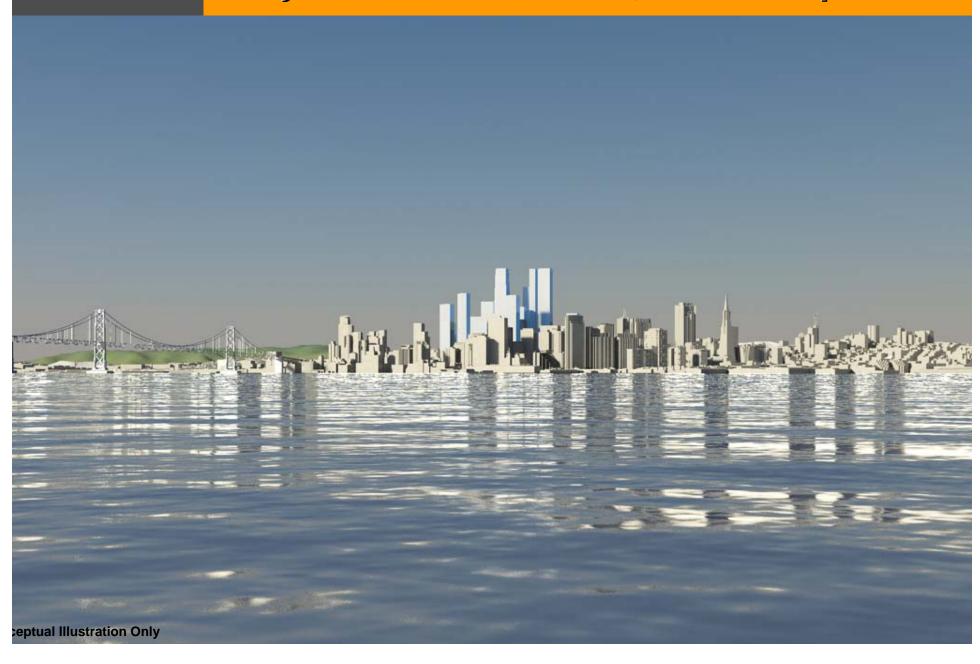
Bay/Treasure Island: 1,000'



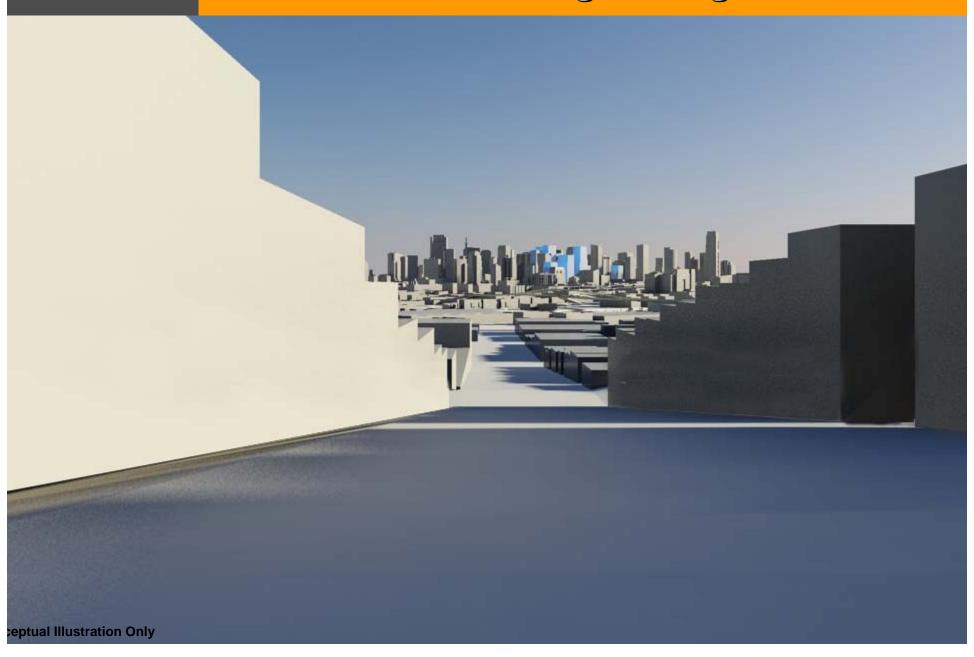
Bay/Treasure Island: 1,200'



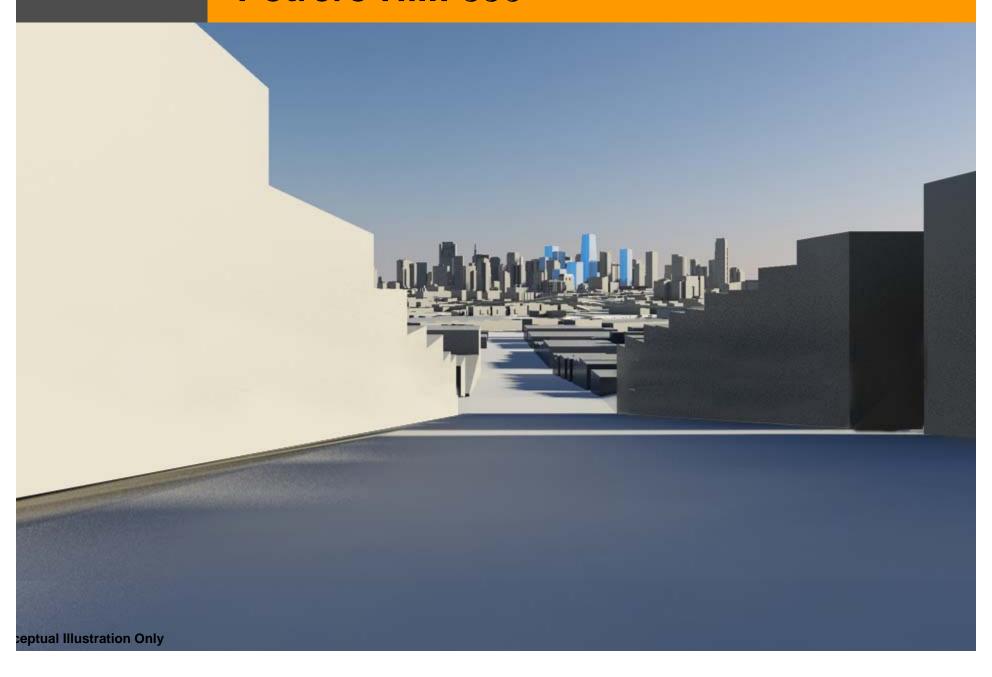
Bay/Treasure Island: 1,200' + Proposals



Potrero Hill: Existing Zoning



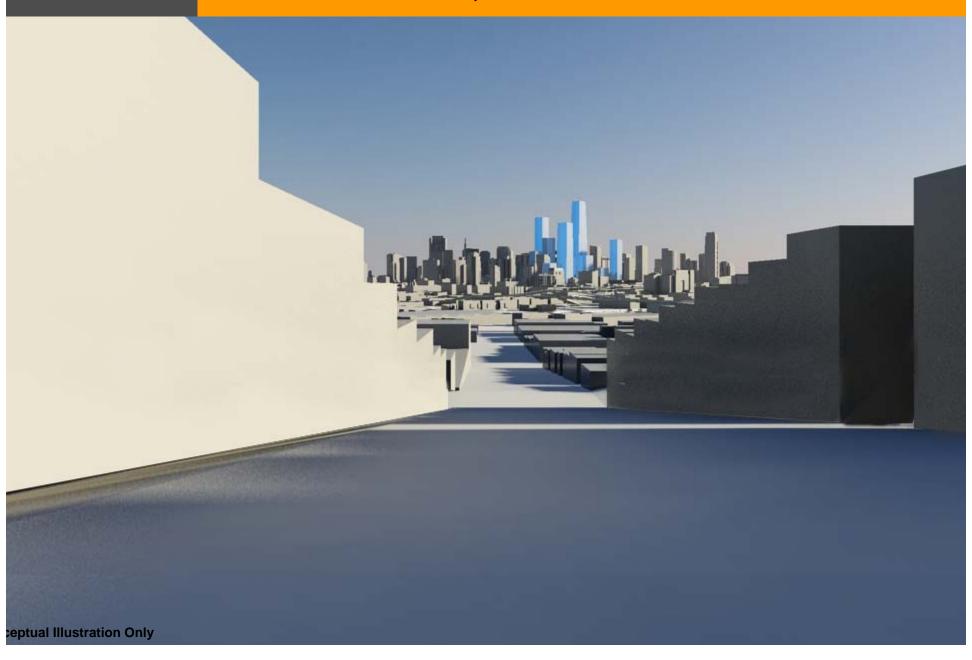
Potrero Hill: 850'



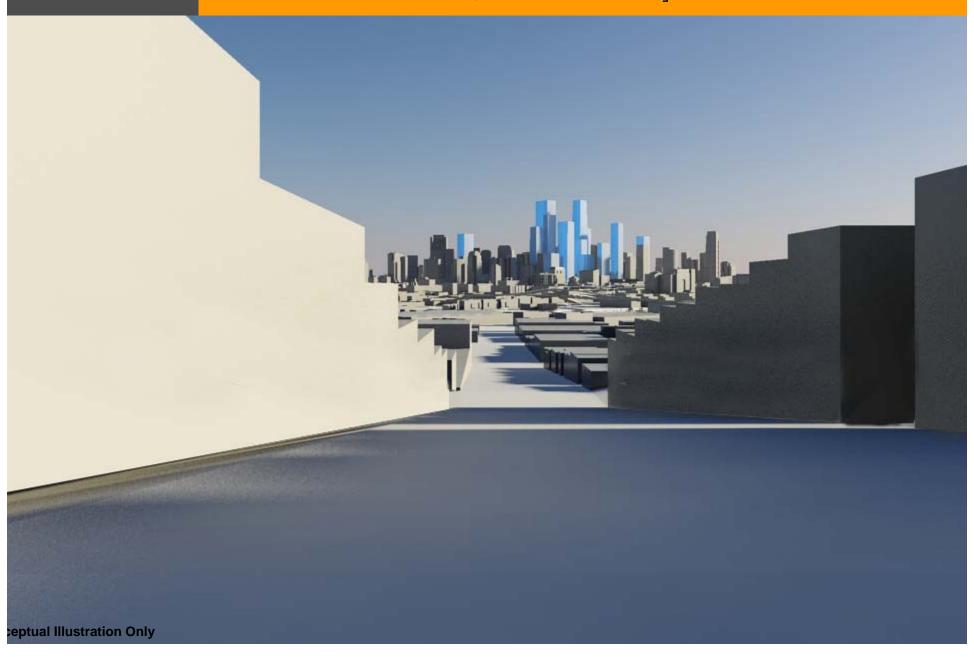
Potrero Hill: 1,000'



Potrero Hill: 1,200'



Potrero Hill: 1,200' + Proposals



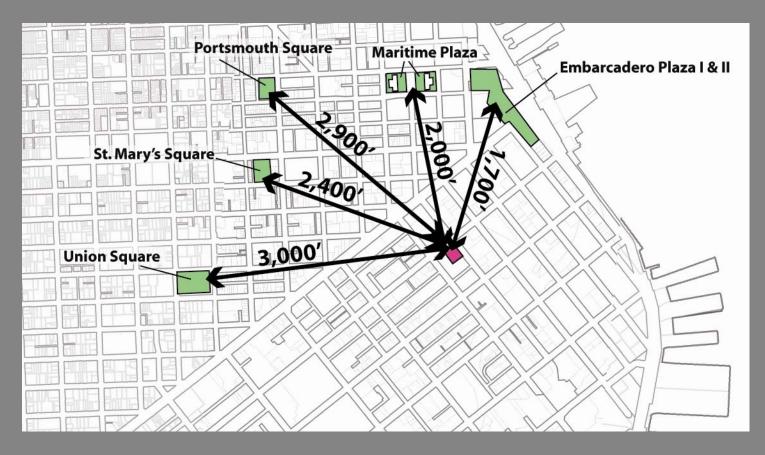
Shadow Analysis





Key Open Spaces of Concern and Investigation

Shadow Analysis





Distances from Transit Tower to Open Spaces

Shadow Considerations

Shadows reach these distant parks only in early hours in certain months when the sun is low in the sky and lines up precisely with the towers.

As a result...

- Shadows *sweep quickly* through the spaces and generally last for *no longer than 15-45 minutes*
- Different parks would be affected in different months generally only one or at two parks can be affected during any one particular day.
- Because the parks are such a far distance from the buildings, the shadows are more diffuse than if the buildings were close-by or immediately adjacent to the spaces.
- Transit Center and District Plan would add over 6 acres of new public open spaces.



Embarcadero Plazas

Potentially affected in late November through early January in the mid-to-early afternoon.

** Transit Tower: At 1,000' in height, Tower's shadow would reach a very small portion of one section of available sun in the plaza for about 20 minutes, but above 1,000' the shadow would sweep across all of the pockets of available sun in the plaza for over an hour and could reach across the Embarcadero to the Ferry Building.



Union Square

Potentially affected in mid-April through May and mid-July thru mid-August for some portion of the time between 7:00-8:00 a.m.

Shadows from Transit Tower and nearby building at 1st/Mission would pass through the northwest and southwest corner of Square.



St. Mary's Square

Potentially affected in mid-February through mid-March and mid-September through mid-October for some portion of the time between 8:00-9:00 a.m.

Shadows from Transit Tower and nearby building at 1st/Mission could pass through the southwest corner of Square.

**1st/Mission site: Shifting the tallest building on the site to the Mission Street side of the site (from further north on 1st Street) and limiting its height to under 900' would eliminate shadows on St. Mary's Square from buildings on this site.



Portsmouth Square

Potentially affected in January and mid-November to early-December for some portion of the time between 8:00-9:00 a.m.

Shadows from Transit Tower and nearby building at 1st/Mission could pass through most of the Square.

** Shifting the Transit Tower to the east side of its site would reduce some of the shadow it would cast on Portsmouth.



Update of Shadow Analysis Methodology

Technical Memo to be completed in the next few months regarding:

1. Accuracy

Uncertainty/Margin of Error. Current standard of "de minimis" shadow is potentially smaller than actual margin of error of the models themselves

Refraction: How to consider the blurring of long shadows in the atmosphere?

Sun: disc vs. point source; results in shadows of varying densities and blurred edges.

2. Significance

Shadow density: At what point is a shadow so diffuse as to be imperceptible?

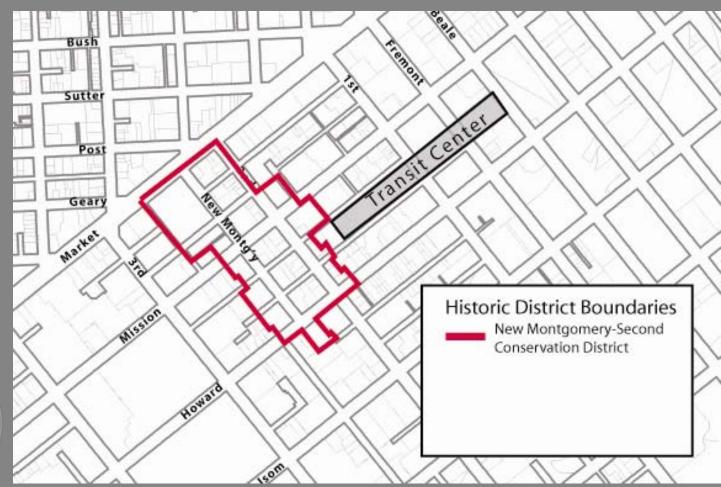
Opacity of materials: How to consider glass screens and other transparent materials that do not block all sunlight?



Historic Resources



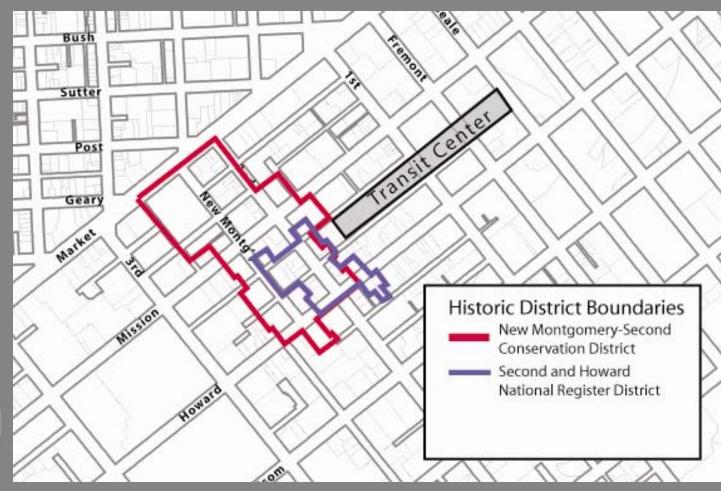
Existing Historic Districts





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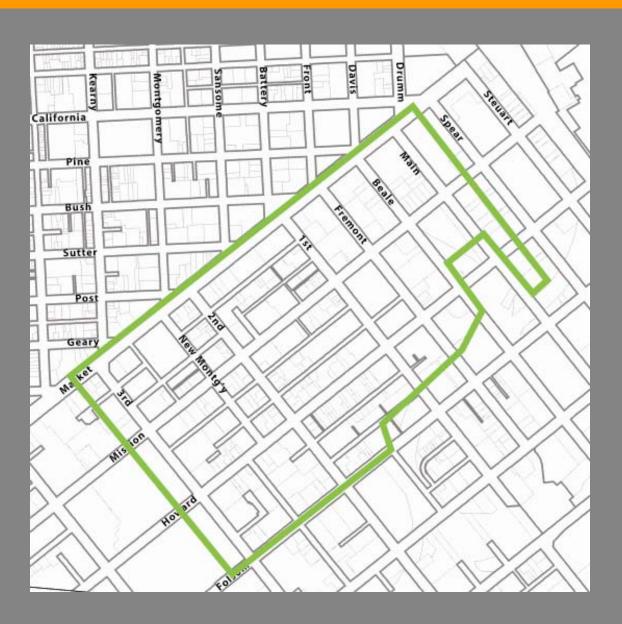
Existing Historic Districts





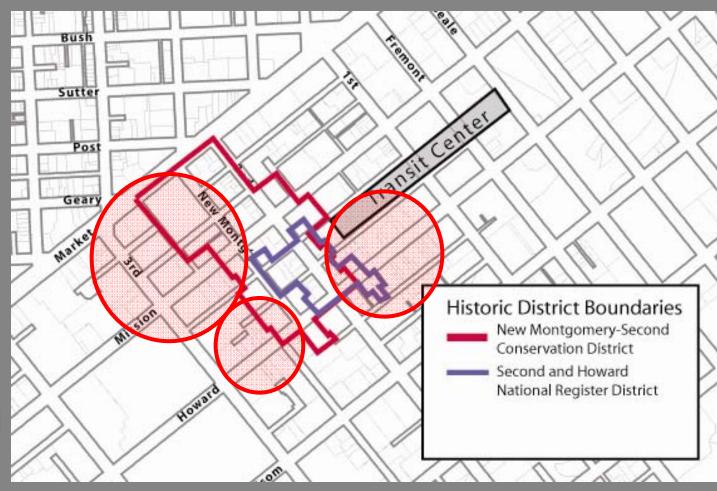
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Historic Survey Area





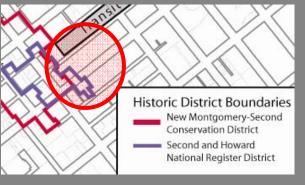
Areas of Examination for Potential District Expansion





SAN FRANCISCO
PLANNING
DEPARTMENT

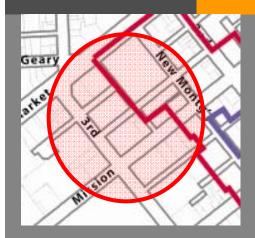
Howard Street between 1st and 2nd Streets





South side of Howard Street

Mission Street between New Montgomery and 3rd Streets







South side of Mission Street

Howard Street between 1st and 2nd Streets

Potential Expansion of New Montgomery-2nd St Conservation District

 Article 11 Rating of individual buildings (Category 1-5) in expanded district

Protection of individual resources not in Conservation District

 Article 11 Rating (Category 1-5) and/or Article 10 Landmark Designation



Other considerations:

- Ability of building owners to sell Transferable Development Rights (TDR)
- Potential adjustment of height limits
- Design guidelines within Conservation District

Other Urban Design Issues (upcoming workshops)

- Tower Bulk/floorplate
- Ground floor design and uses
- Podium/streetwall interface
- Materials
- Pedestrian circulation
- Building open space requirements and public amenities







Ground Level Wind Analysis

Wind analysis to be completed within coming 2 months.

Preliminary testing, including all projects filed with Planning Department to date, indicates that there are no wind hazard exceedances at 1st/Mission in the heart of the Plan area (adjacent to the Transit Tower).



Further testing will be done for the current proposed heights and throughout the entire plan area.

Balancing Objectives and Public Values

Regional sustainability and Increasing Capacity to reach Smart Growth Goals

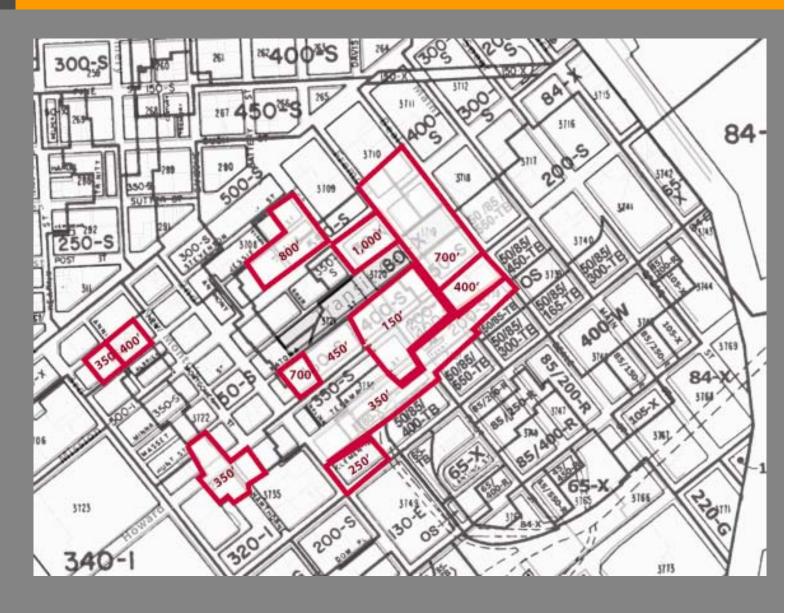
Raising revenue for Transit Center and public infrastructure

Elegant urban form, skyline and views

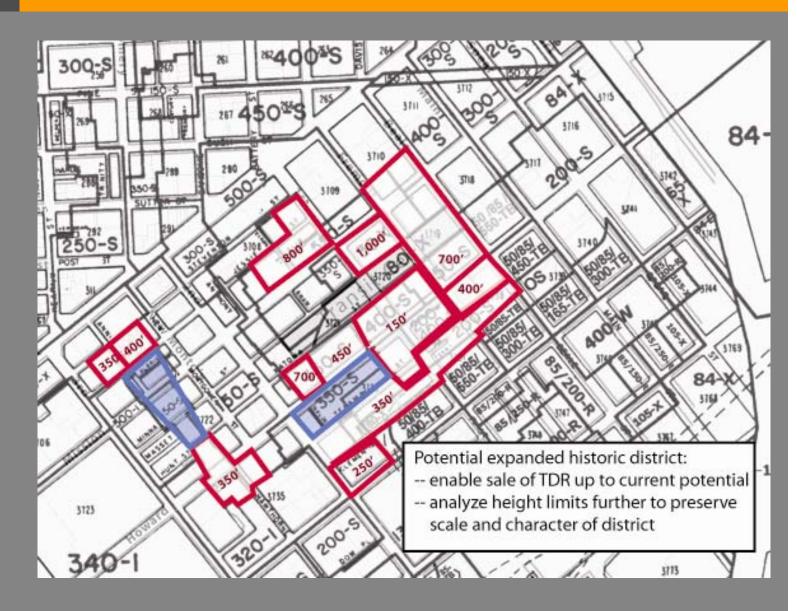
Moderating shadow impacts on public spaces

Protecting historic resources





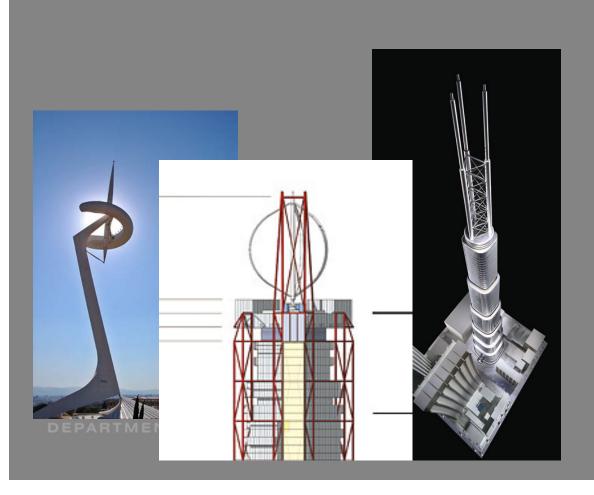


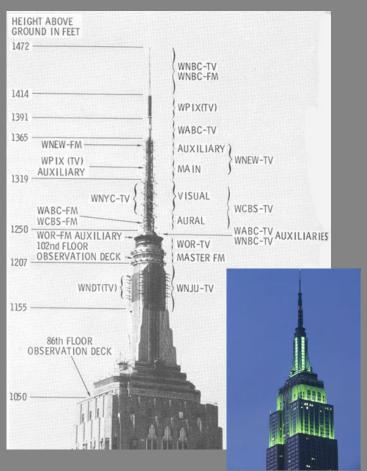




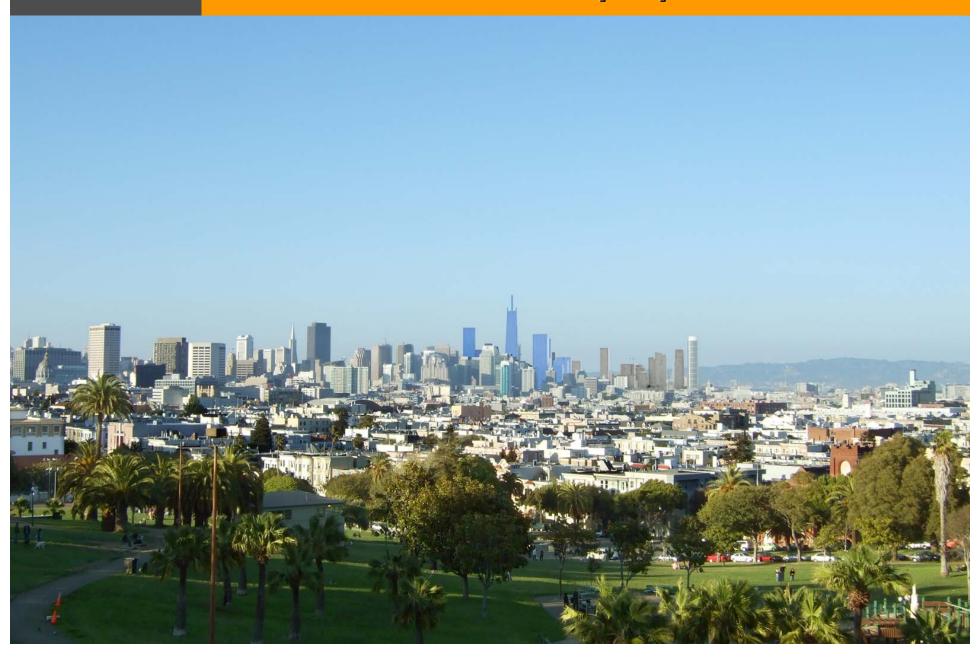
Height Limits & Shadows: Building Tops

Create light, transparent sculptural vertical expression to terminate Transit Tower (above 1,000' height limit) to enhance skyline expression while avoiding casting shadows











Buildout Potential

Net Additional Space	Increment over
	Existing Zoning

Office Space 5.82 million gsf +2.54 million gsf

Housing Units 1,350 +235

Hotel Rooms 1,370 +425

Retail Space 85,000 gsf ---

Total Space 9.2 million gsf +3.52 million gsf

Potential Public Revenue

Rough estimate of additional revenue for Transit Center and other public improvements, based on current projected buildout

Mello-Roos District

\$152-\$220 million*

Other revenue additions:
Increased land sales value (TJPA parcels only)
Increased Tax Increment (Redevelopment Area)

Complete analysis and discussion of revenue plan, mechanisms, and public improvements in upcoming workshops

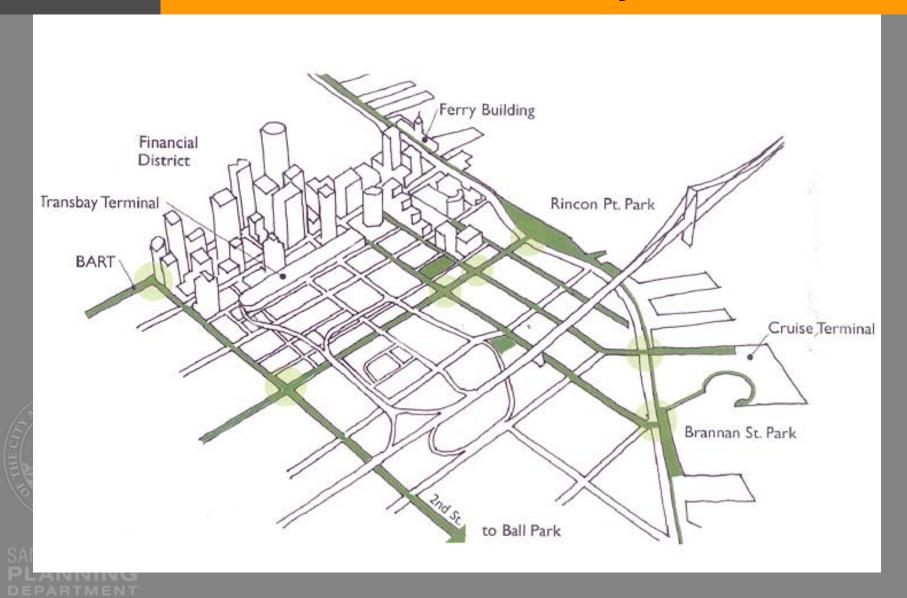
Notes:

* Range depending tax rate, net of cost of funds and land discount on TJPA parcels.

Public Realm: Streets and Open Spaces



Rincon Hill and Transbay: Public Realm

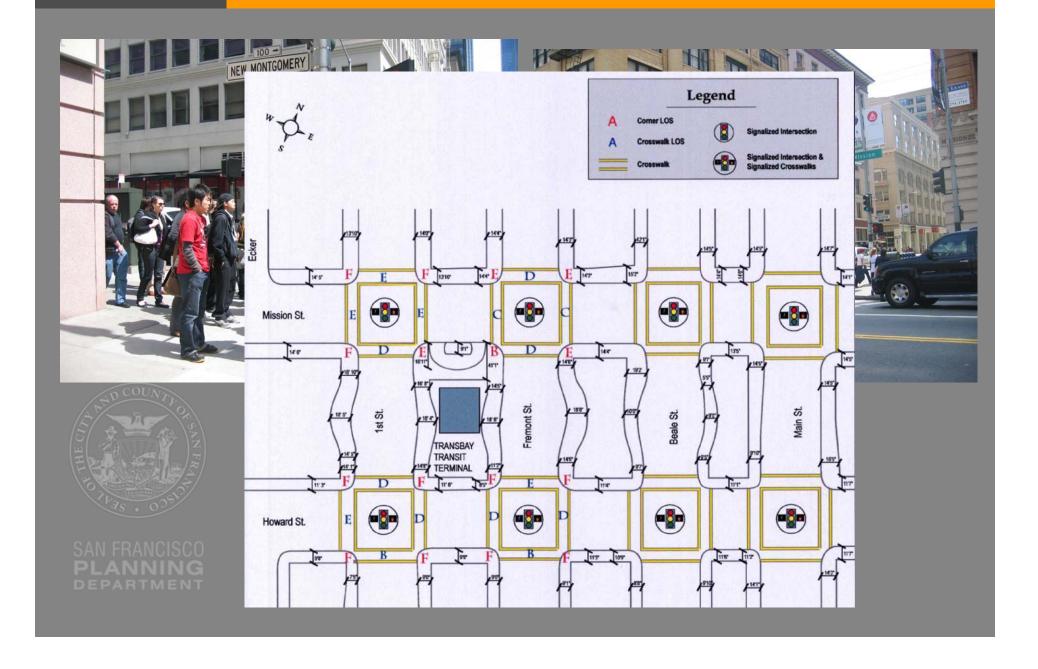


Public Realm Priorities

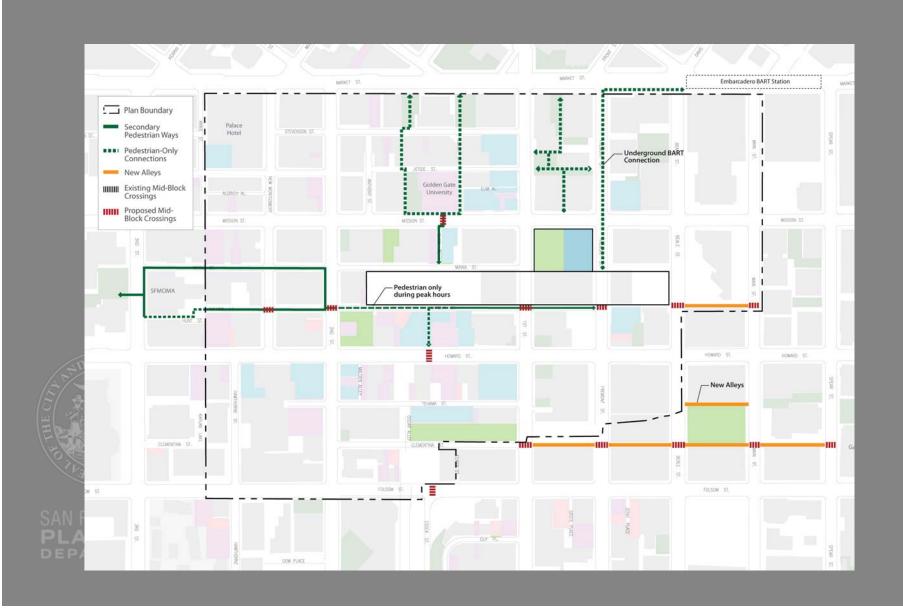
- Pedestrian circulation (i.e. accommodating high volumes of pedestrians)
- Graceful pedestrian realm
- Transit movement
- Connections to Transit Center Park
- Other non-single occupant auto circulation (e.g. bicycles, carpools)



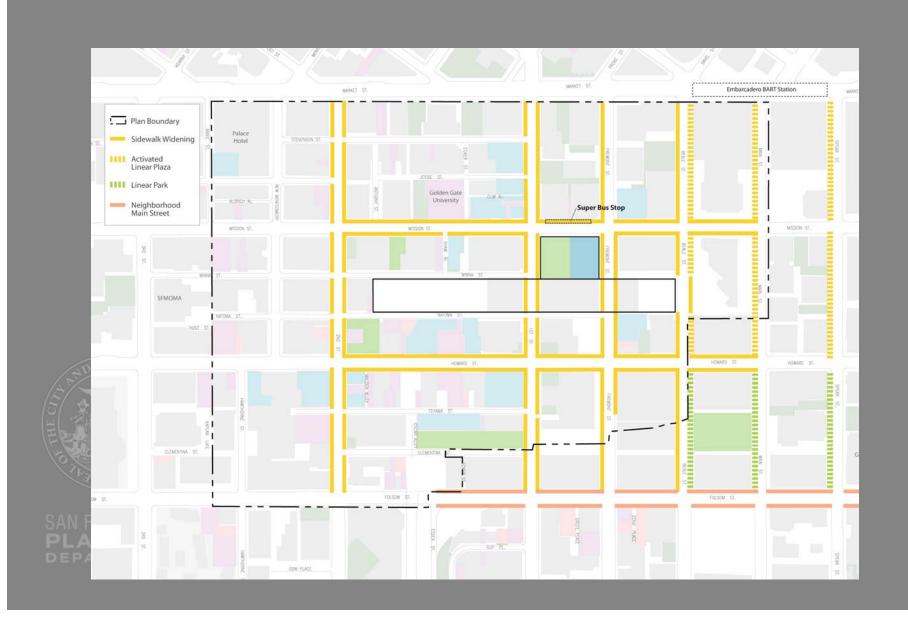
Pedestrian conditions



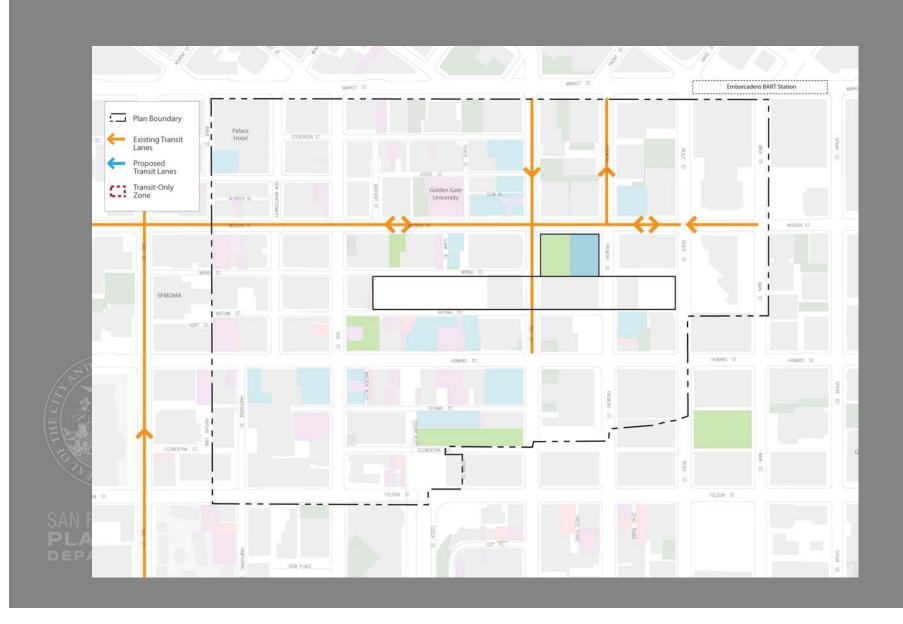
Proposed Mid-Block Pedestrian Crossings



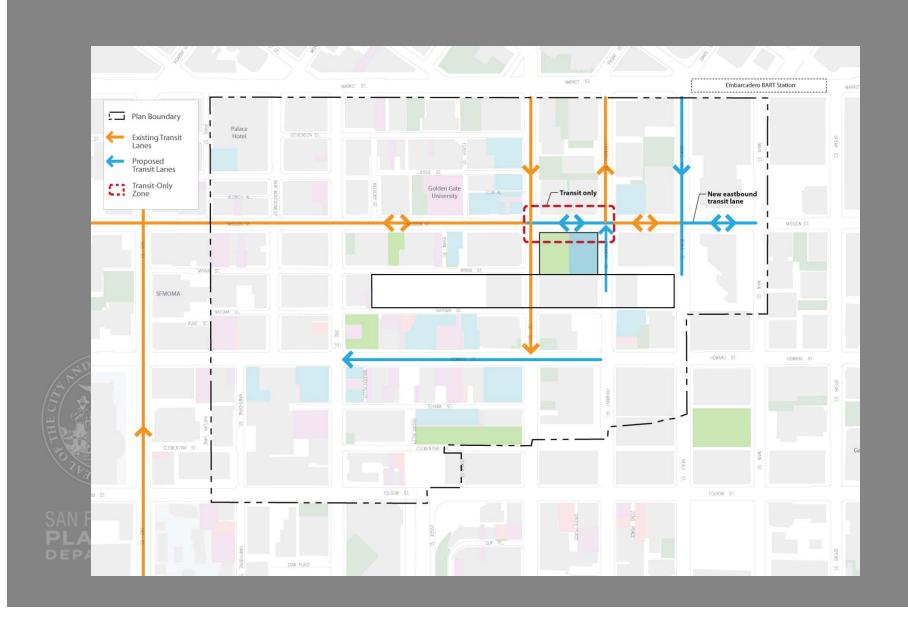
Proposed Sidewalk Widening



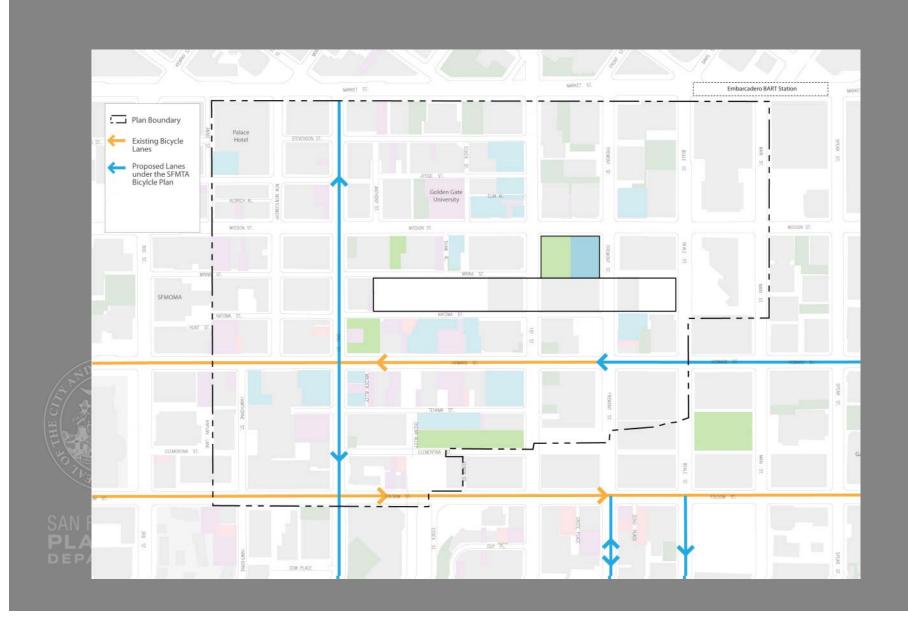
Existing Dedicated Transit Lanes



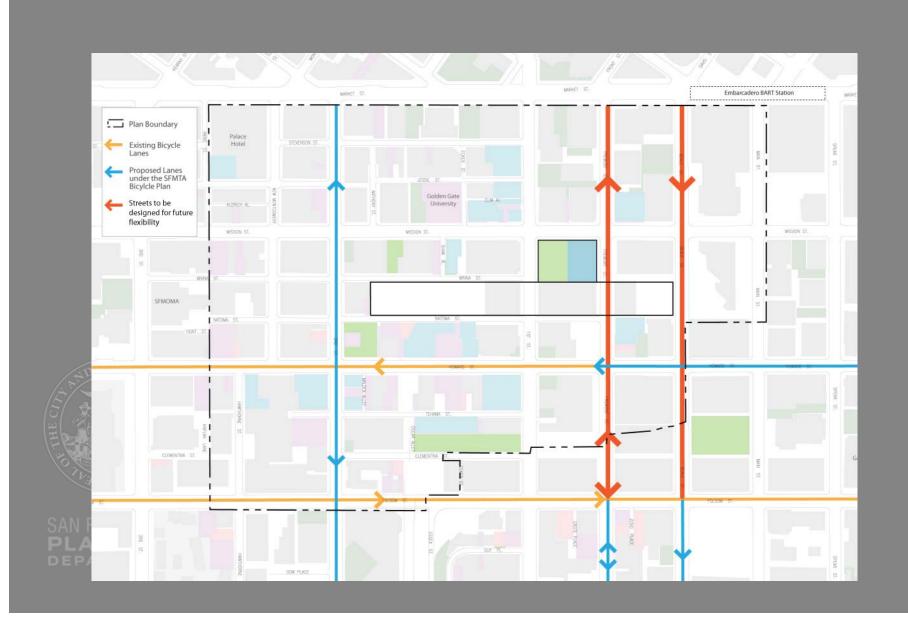
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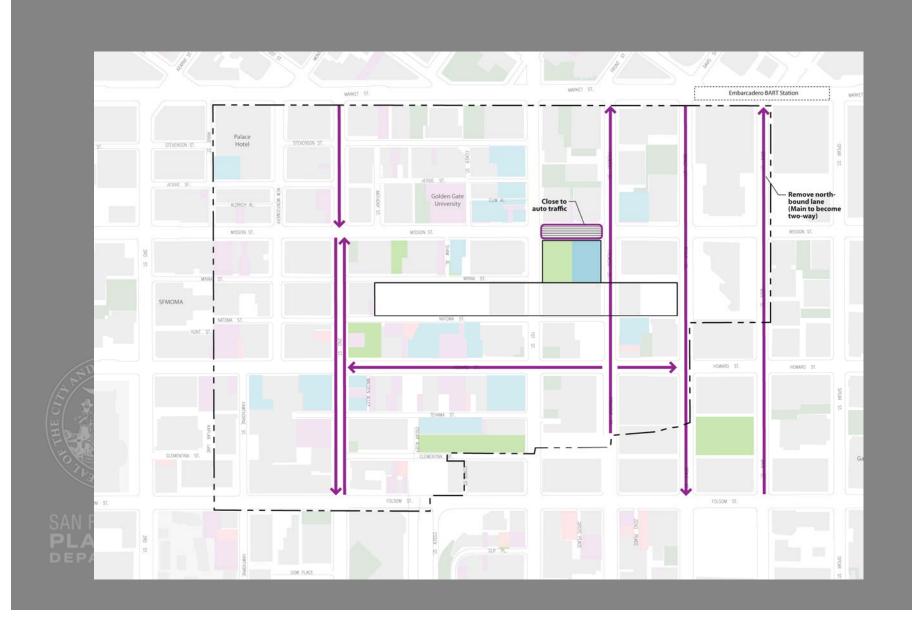
Existing and Planned On-Street Bicycle Facilities



Streets for Future Consideration of Bicycle Improvements



Proposed Traffic Lane Removal



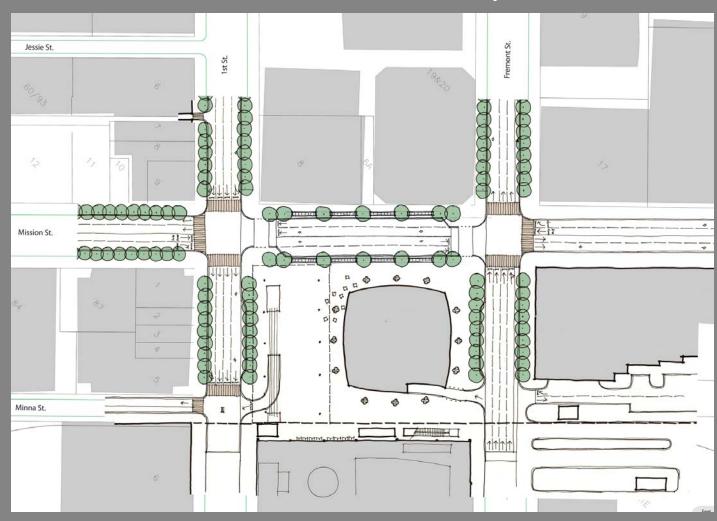
- Projected very heavy pedestrian volumes
 - •To and from Transit Center
 - •To and from major new buildings
 - General background growth
- Heavy transit activity
- Front door of the Transit Center

Current narrow sidewalks
Crosswalks not large enough for projected volumes

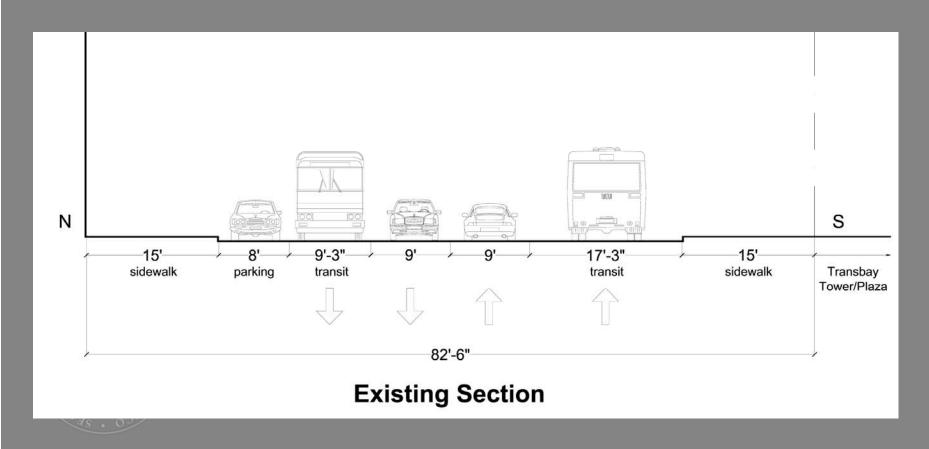




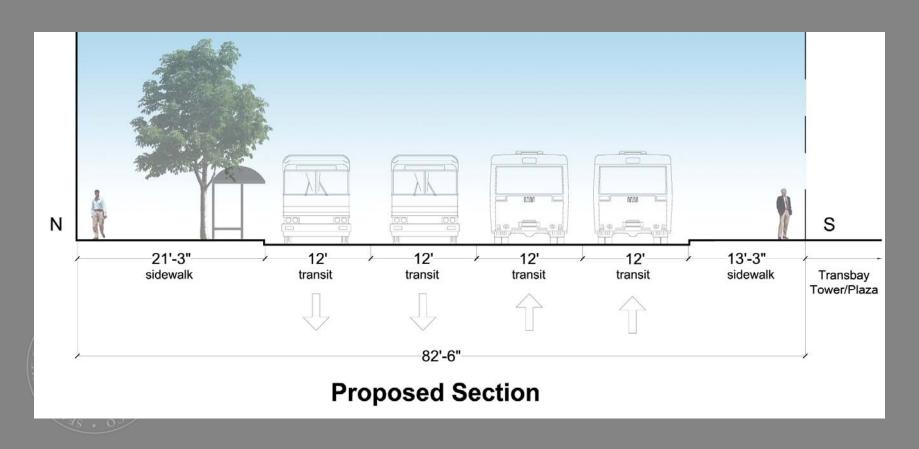
- Widen sidewalk on north side of street
- Create "Super Stop" for westbound buses
- Turn Mission Street between First and Fremont into a transit-only zone







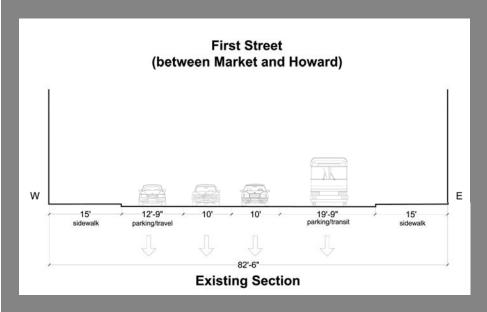


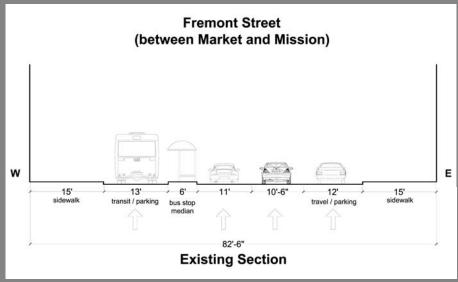




1st and Fremont Streets

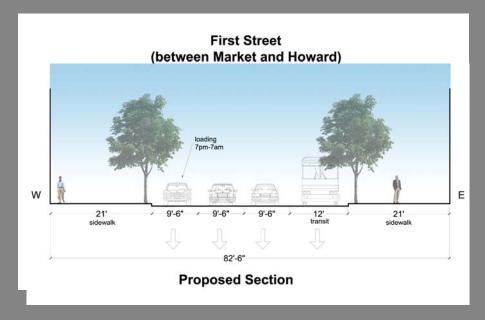
- Critical pedestrian links between Transit Center and Market Street
- Widen sidewalks to handle pedestrian volumes and provide adequate landscaping/amenities
- Preserve and protect dedicated transit lanes
- Eliminate on-street parking between Market and Howard.
- Eliminate one travel lane on Fremont Street

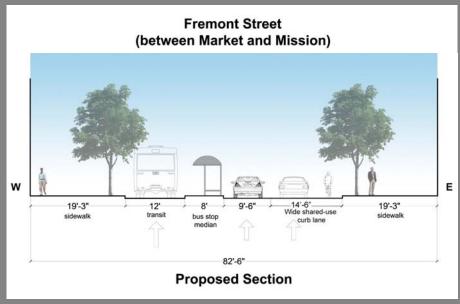




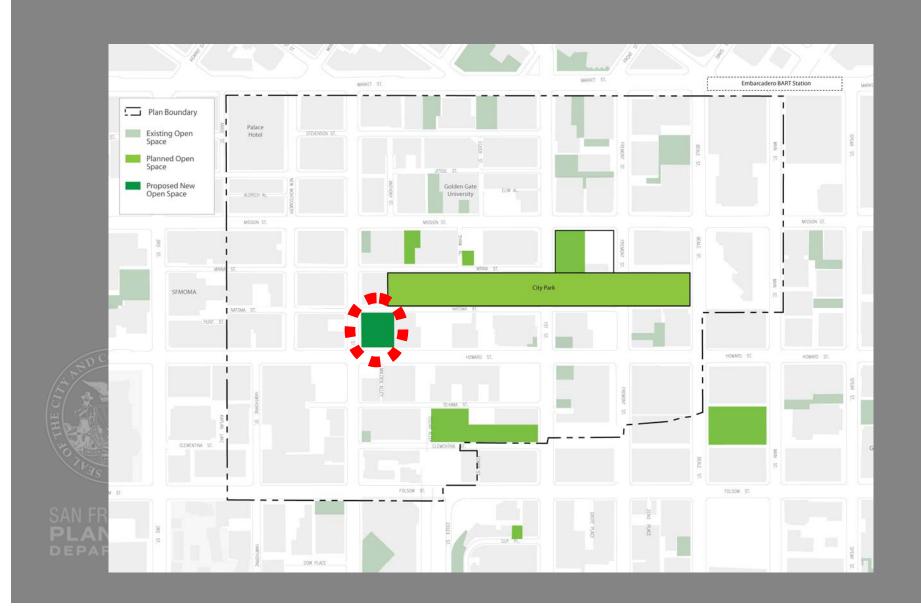
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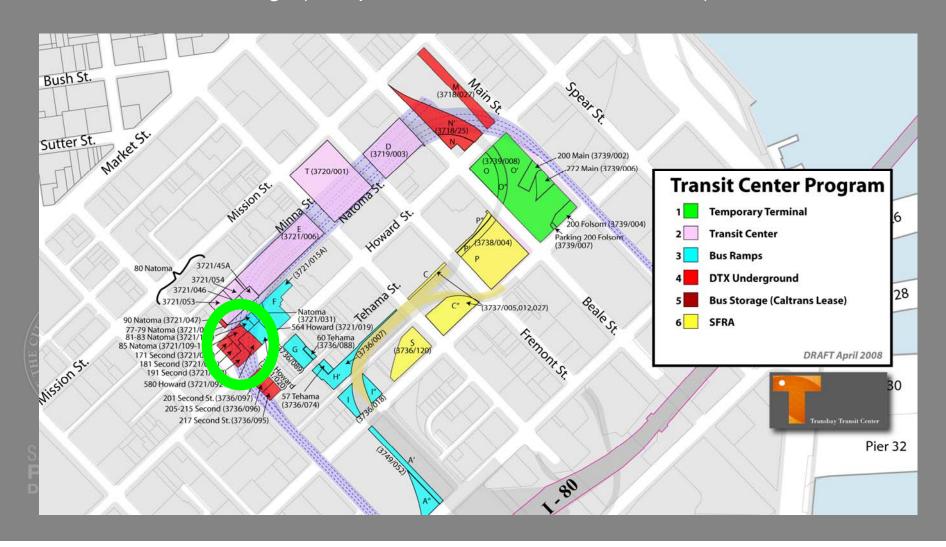


Open Space



2nd/Howard Parcels – Train Right-of-Way

- Parcels to be acquired for train construction
- Severely limited development potential due to train curvature below grade
- Loss of historic buildings (except removal and return of facades)



2nd/Howard: Plaza, park connection

New public plaza

• Significant signature vertical connection to City Park

• Potential incorporation of partial historic building facades

Retail





2nd/Howard: Plaza, park connection

New public plaza

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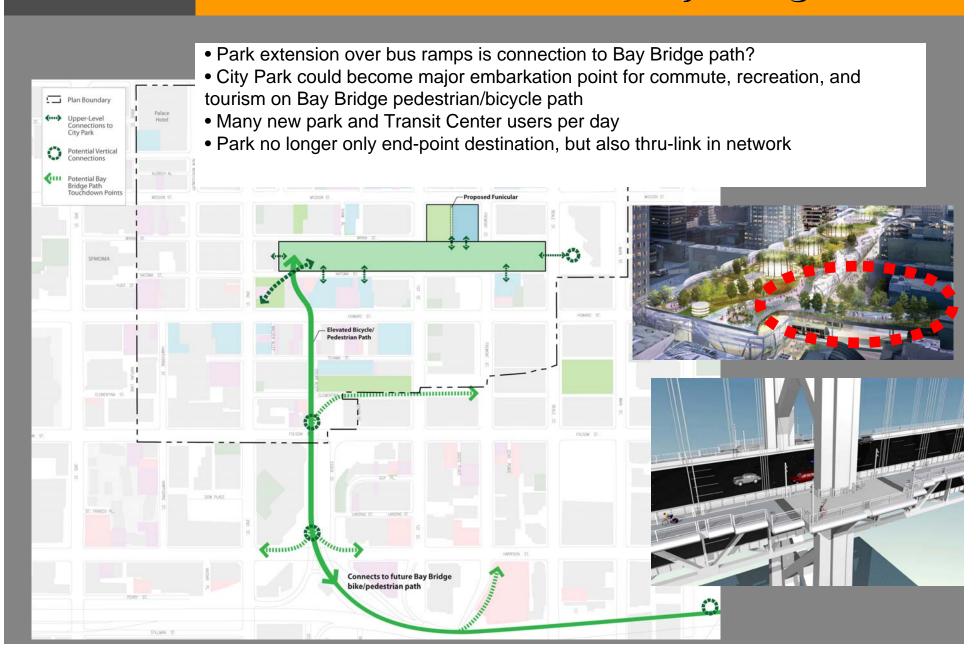
Potential incorporation of partial historic building facades

Retail





Future Connections to Bay Bridge Path



Future Workshops

Mid-Late June:

Refinements of Urban Form, Public Realm, Historic Resources Proposal

Design Guidelines -- Bulk/Massing, Ground Floor

July:

Financial Plan/Public Benefits

Final Proposal



Contact

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Thank You

