Session 3:

DESIGN OF THE BUILT ENVIRONMENT

Excelsior and Outer Mission Land Use and Housing Working Group

11/30/2017

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CONTENTS & AGENDA

- Welcome and Introductions
- 2 Review Notes
- 3 Review Agenda
- 4 Presentation and Discussion
 - -Housing and Other Land Uses on the Corridor
 - -Neighborhood Character
- 5 Strategies to Promote Good Urban Form
- 6 Summary and Next Steps



Design Matters.

Why?

What is design?

ASPECTS OF DESIGN WE'LL COVER TODAY

- 1 Housing and Other Land Uses on the Corridor
 - -Unit density -How Many Housing Units?
 - -Height —How Tall?
 - -Function —How Does a Unit Function?

- Neighborhood Character
 - -Promoting Great Streets
 - -Architecture and Urban Design Guidelines
 - -Historic Preservation



AN OVERVIEW ON DENSITY



What does density mean to you?

BENEFITS OF DENSITY





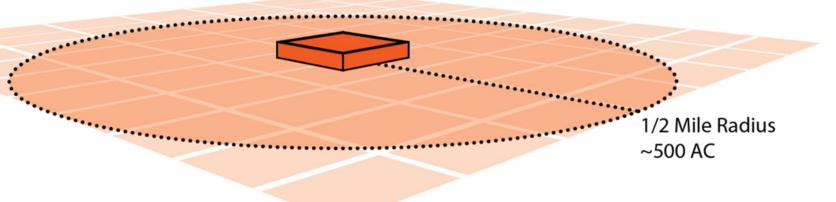
CRITICAL THRESHOLDS GROCERY

It takes ~10,000 households to support a full-service supermarket (50,000sf)¹

Walkable catchment area = 1/2 mile radius (10 min. walk)

Gross Dwelling Unit Density within 1/2 mile radius of the supermarket = **20 DU/AC**

Assuming 35% Residential Land, **Average Net Parcel Density = 57 DU/AC**



1: Lincoln Institute of Land Policy. Visualizing Density. http://www.lincolninst.edu/subcenters/visualizing-density/









Why do you think some of these positive things are connected to

DENSITY?







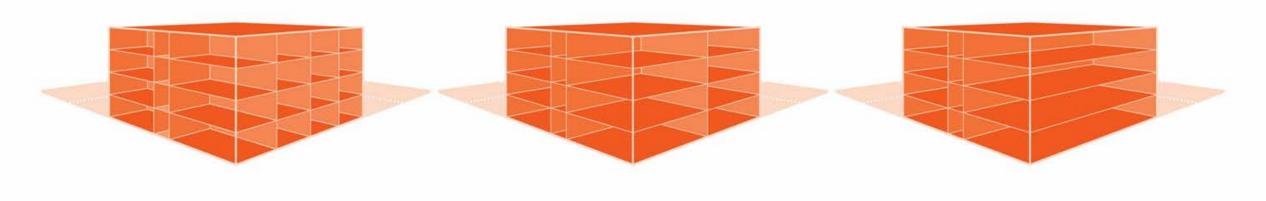






ONE WAY TO MEASURE DENSITY

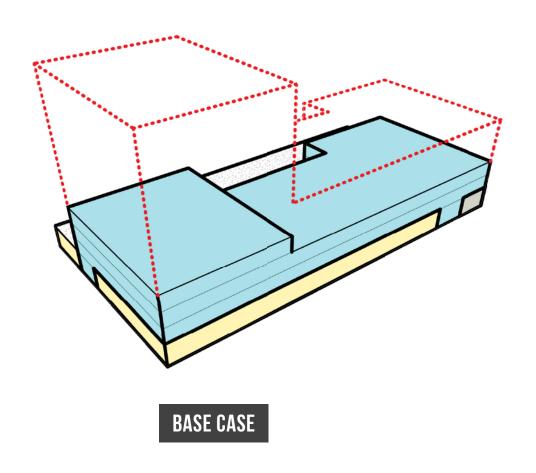
Equivalent Urban Form can result in a wide range of dwelling units!



32 UNITS 16 UNITS 8 UNITS



HOW WE DO DENSITY (UNITS/AREA) IN SAN FRANCISCO



Building Envelope

Existing Height Limit

Commercial and Parking

Residential, Under Existing Controls

NC-3

130-E

35,000 sf Lot Area

Density: 1/600 sf

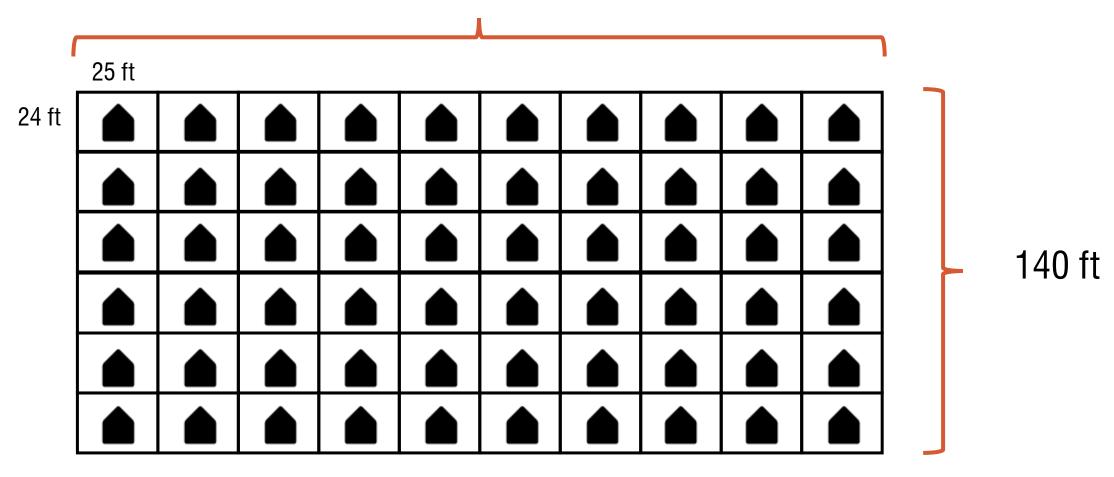
60 Units Allowed

- Encouraging density allows more housing to developed on a parcel of land.
- For example, building to the red dotted line instead of the yellow & blue boxes.





250 ft



Site area:

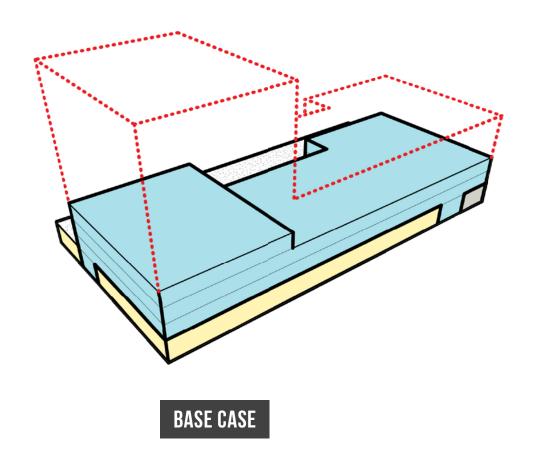
Unit density:

35,000 sq ft \div 600 sq ft \approx 60 units



EXCELSIOR
OUTER MISSION
NEIGHBORHOOD STRATEGY

HOW WE DO DENSITY (UNITS/AREA) IN SAN FRANCISCO



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Existing Height Limit

Commercial and Parking

Residential, Under Existing Controls

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130-E

35,000 sf Lot Area

Density: 1/600 sf

60 Units Allowed

- Current methods can make projects financially infeasible.
- For example, building to the red dotted line instead of the yellow & blue boxes.



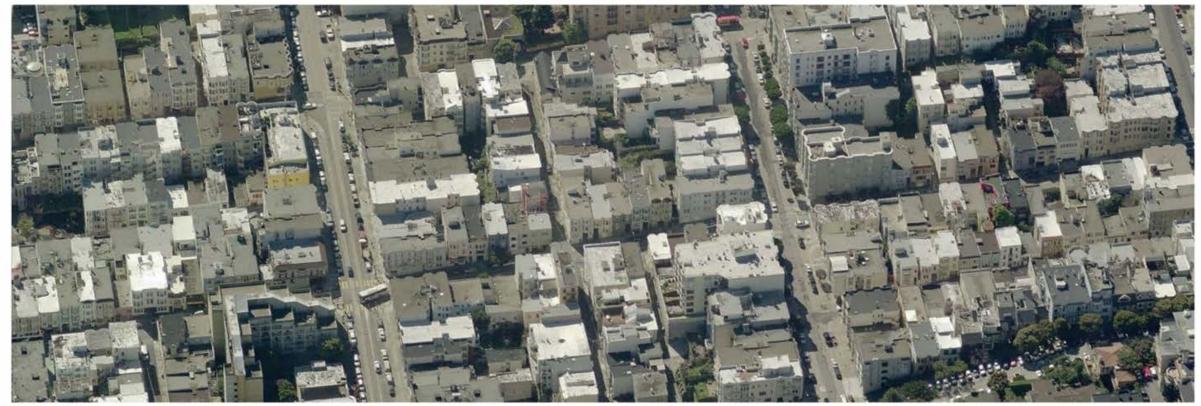
IMPACT OF LOW-DENSITY REGULATIONS

- Decreases population and limits the variety of amenities and services
- Infrastructure costs more and serves fewer people
- 3 Higher per unit housing cost
- 4 Harder to build housing
- Results in exclusionary neighborhoods
- 6 Less housing means fewer affordable units











NOB HILL, SAN FRANCISCO

Density Range: 5 du/ac - 766 DU/AC

Average net residential parcel density: 121 du/ac

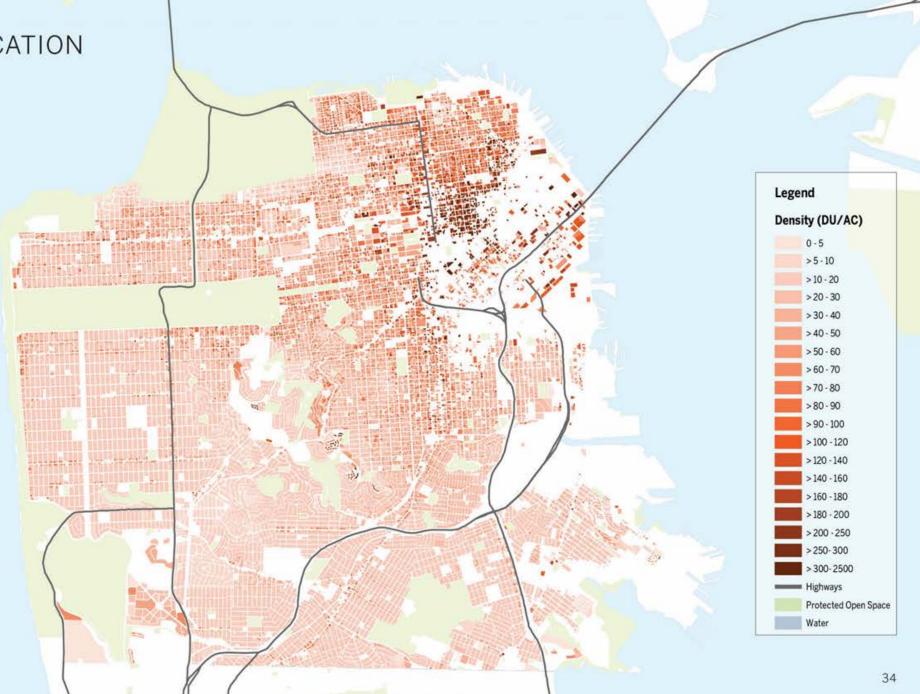
Neighborhood residential density: 94 du/ac

Gross district density: 63.8 du/ac

SCALES OF QUANTIFICATION INDIVIDUAL PARCELS

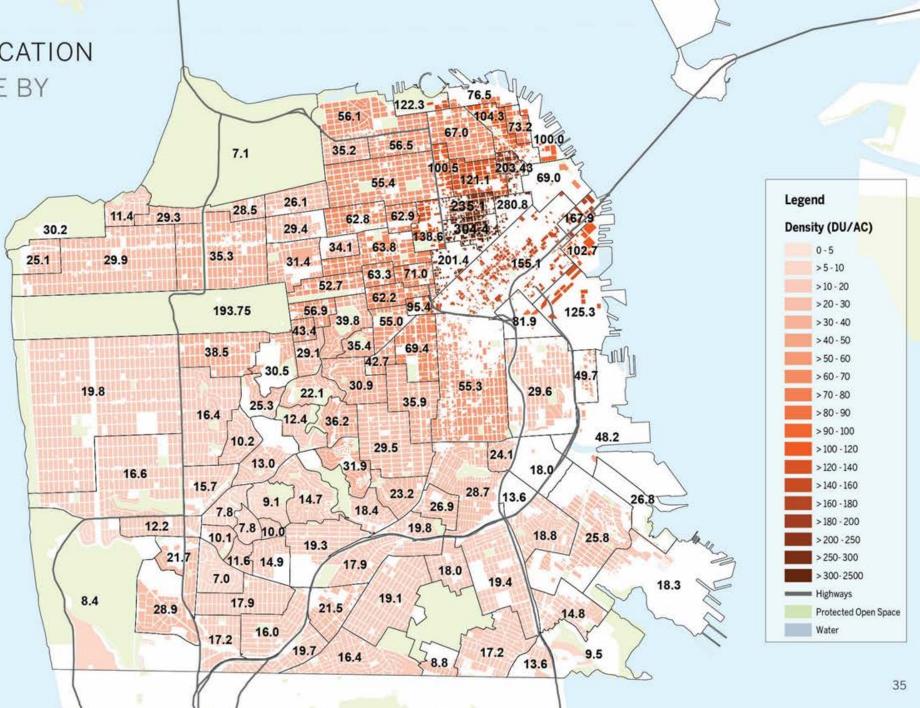
S.F. has ~364,500 DU on about 10,600 acres of residential parcel area

Individual parcel density varies widely from < 1 DU/AC to 2500 DU/AC



SCALES OF QUANTIFICATION NET PARCEL AVERAGE BY NEIGHBORHOOD

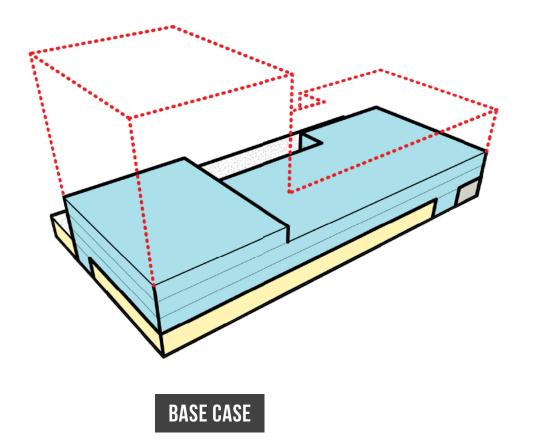
Citywide, the Average Net Residential Parcel Density ~34.4 DU/AC



HOW WE COULD REGULATE DENSITY

Local zoning could allow property owners and developers to build up to the red line below, without changing the building height.

"Density De-Control" allows developers to maximize the existing buildable area.



Building Envelope

Existing Height Limit

Commercial and Parking

Residential, Under Existing Controls

NC-3

130-E

35,000 sf Lot Area

Density: 1/600 sf

60 Units Allowed



HOUSING AND OTHER LAND USES ON THE CORRIDOR



HEIGHTS IN THE EXCELSIOR & OUTER MISSION NEIGHBORHOOD COMMERCIAL DISTRICT



HEIGHTS IN THE DISTRICT





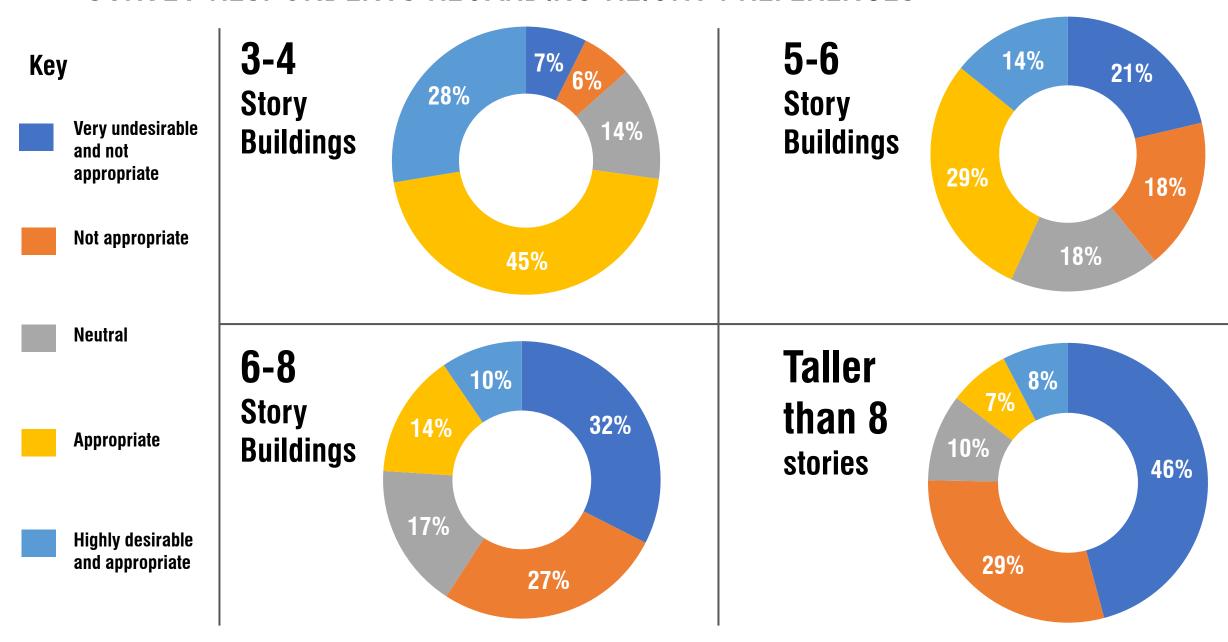






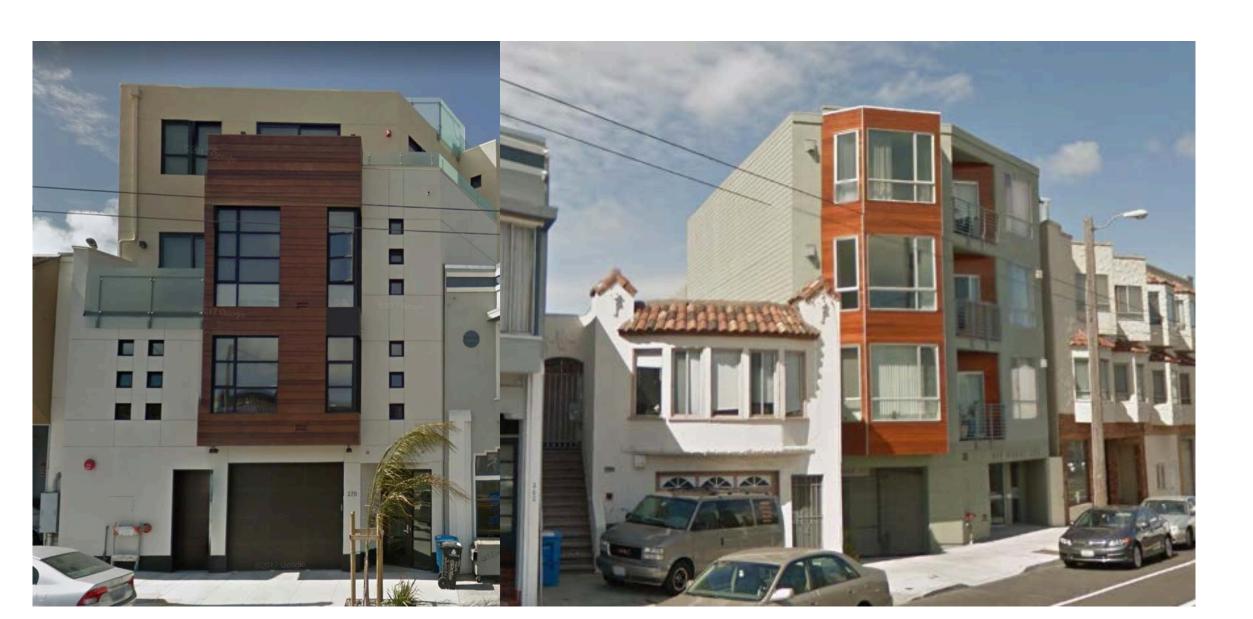


SURVEY RESPONDENTS REGARDING HEIGHT PREFERENCES

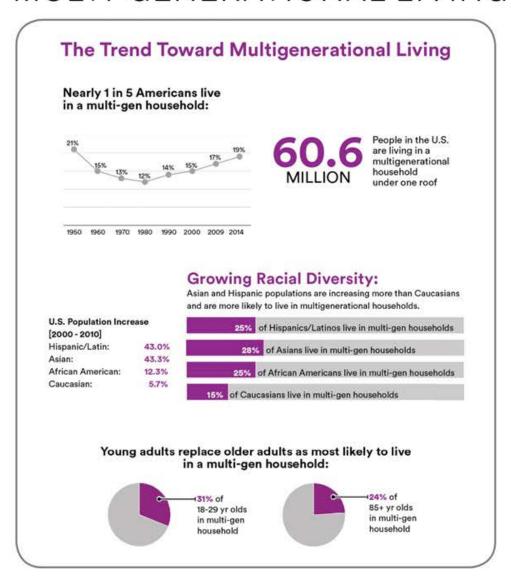




AN IMAGE OF DENSITY - 270 AND 248 OCEAN AVENUE



MULTI-GENERATIONAL LIVING / AGING IN PLACE





2 GEN Parents & Adult Children



3 GENParents, Adult Children, & Grandchildren



SKIPPED Grandparents & Grandchildren w/o Parents



MORE THAN 3 GEN



CREDIT: KTGY ARCHITECTS

Source: KTGY Architects http://ktgy.com/work/ensemble/

MISSING MIDDLE



THIS IMAGE MAY ONLY BE USED WITH ACCOMPANYING ILLUSTRATION ATTRIBUTION TO OPTICOS DESIGN, INC.



FINDING THE RIGHT TOOLS FOR YOUR COMMUNITY

	DEVELOPMENT-INFLUENCING TOOLS																			
	DIRECT CONTROLS			FORM BASED CONTROLS						REGULATORY CONTROLS					PROCESS					
COMMUNITY GOALS	DENSITY MAXIMUMS	DENSITY MINIMUMS	DENSITY BONUS PROGRAMS	HEIGHT CONTROLS	SITE COVERAGE CONTROLS	SETBACK CONTROLS	REAR YARD REQUIREMENTS	BULK + MASSING CONTROLS	GROUND FLOOR REQUIREMENTS	SUNLIGHT ORDINANCES	REDUCED PARKING RATIOS	TRANSPORTATION DEMAND MANAGEMENT STRATEGIES	TRANSFER OF DEVELOPMENT RIGHTS OPPORTUNITIES	ACCESSORY DWELLING UNIT ALLOWANCES	VARIANCES	INCLUSIONARY HOUSING PROGRAMS	FINANCING MECHANISMS +	EXPEDITED REVIEW + APPROVAL	IMPACT FEES	DEVELOPMENT / COMMUNITY BENEFITS AGREEMENTS
SUPPORT EFFECTIVE TRANSIT		*									*	+								+
INCREASE AMENITIES + SERVICES		+				+			+						+				+	+
PRESERVE CHARACTER + LIVABILITY				+	+	+	+	+	+	+			+	+			+		*	+
EXPAND DIVERSITY AND CHOICE		+	+								+	+	+	+	+	4	+			+
PROMOTE AFFORDABILITY		+	+								+	+	+	+	*		+	*		
PROVIDE AFFORDABLE HOUSING			*								+	+	+		*	+	+	*		+
FACILITATE URBAN SUSTAINABILITY		+							+		+	+					+		+	+
ENHANCE WALKABILITY		+				+		+	+	+	+	+								+
IMPROVE PUBLIC HEALTH		+				+			+	+	+	+								

NEIGHBORHOOD CHARACTER



Neighborhood Character

Urban Form

Public: Streets

Private: Buildings

DESIGN PRINCIPLES







DESIGN PRINCIPLE 1:

ENCLOSURE

Enclosure refers to the degree to which streets and other public spaces are visually defined by buildings, walls, trees, and other

vertical elements.

Spaces where the height of vertical elements is proportionally related to the width of the space between them have a room-like quality.

Source: Urban Land Institute



DESIGN PRINCIPLE 1:

ENCLOSURE

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vertical elements.

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Source: Urban Land Institute



DESIGN PRINCIPLE 2:

HUMAN SCALE

Human scale refers to a **Size**, **texture**, and articulation of

physical elements that match the size and proportions of

humans and, equally important, correspond to the speed at which humans walk. Building details, pavement texture, street trees, and street furniture are all physical elements contributing to human scale.

Source: Urban Land Institute



DESIGN PRINCIPLE 3:

LINKAGE

Linkage refers to physical and visual connections—from building to street, building to building, space to space, or one side of the street to the other—that tend to unify disparate elements. Tree lines, building projections, and marked crossings all create linkage. Linkage can occur longitudinally along a street or laterally across a street.

Source: Urban Land Institute



STRATEGIES TO PROMOTE GOOD URBAN FORM

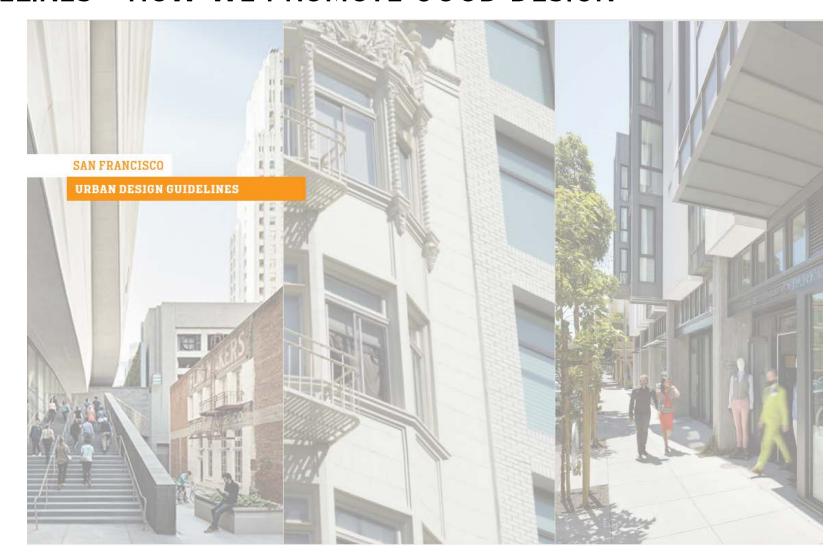


URBAN DESIGN GUIDELINES - HOW WE PROMOTE GOOD DESIGN













Urban Design Guidelines



Sl	Recognize and Respond to Urban Patterns	
S2	Harmonize Relationships between Buildings, Streets, and Open Spaces]
S3	Recognize and Enhance Unique Conditions]
S4	Create, Protect, and Support View Corridors	2
S5	Create a Defined and Active Streetwall	2
S6	Organize Uses to Complement the Public Environment	2
S7	Integrate Common Open Space and Landscape with Architecture	2
S8	Respect and Exhibit Natural Systems and Features	2



Al	Express a Clear Organizing Architectural Idea	34
A2	Modulate Buildings Vertically and Horizontally	36
АЗ	Harmonize Building Designs with Neighboring Scale and Materials	38
A4	Design Buildings from Multiple Vantage Points	40
A5	Shape the Roofs of Buildings	42
A6	Render Building Facades with Texture and Depth	44
A7	Coordinate Building Elements	46
A8	Design Active Building Fronts	48
A9	Employ Sustainable Principles and Practices in Building Design	50



Pl	Design Public Open Spaces to Connect with and Complement the Streetscape	50
P2	Locate and Design Open Spaces to Maximize Physical Comfort and Visual Access	58
РЗ	Express Neighborhood Character in Open Space Designs	60
P4	Support Public Transportation and Bicycling	6
P5	Design Sidewalks to Enhance the Pedestrian Experience	6
P6	Program Public Open Spaces to Encourage Social Activity, Play, and Rest	60
P7	Integrate Sustainable Practices into the Landscape	68



BUILT ENVIRONMENT VALUES FOR THE CITY OF SAN FRANCISCO

Being a Good Neighbor

"The Urban Design Guidelines establish that new buildings have the responsibility to sensitively respond to their context and existing patterns of development while being of their moment."

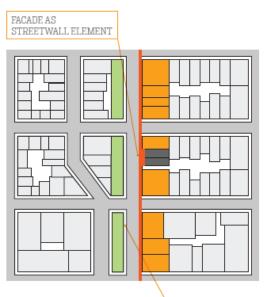
Designing Sustainably

"Concentrating people near shared infrastructure reduces environmental burdens and conserves natural areas..." "Walkable and transit-friendly development reduces energy use, improves air quality, and enhances the health of individuals."

Supporting Human Needs

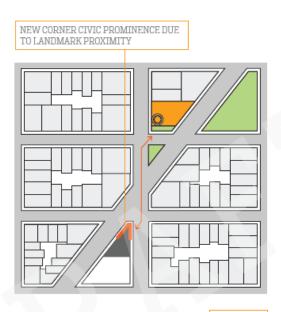
"Buildings and building features that are scaled for human interaction such as steps, doors, windows, and seating contribute to physical and psychological wellbeing."





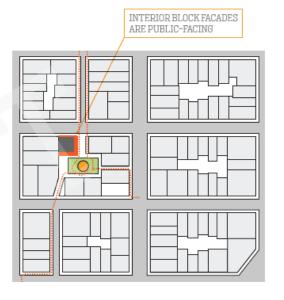


Streetwalls may not only define the line of the block, but the edge of a boulevard, district, or neighborhood.





Civic buildings can act as markers of public space, gateways, or centerpieces in a neighborhood.



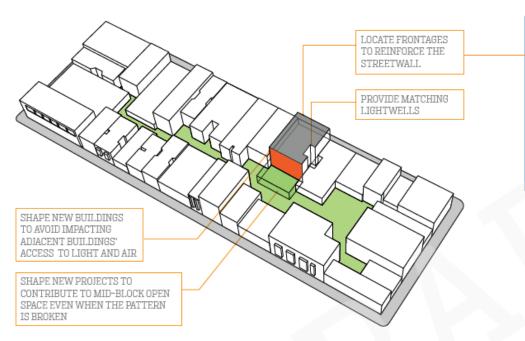


Design projects to orient to key neighborhood elements as well as the street environment.



Recognize and Respond to Urban Patterns



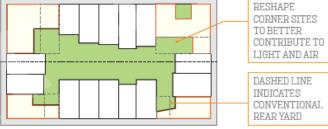


Place front and rear facades to support the overall urban design of the block.



Massing should reflect similar dimensions to street widths and surrounding buildings.





By modifying conventional rear yards, corner sites can better support continuous streetwalls and mid-block open space.



Individual buildings can sculpt massing to respond to both a taller streetwall and a lower one.



Harmonize
Relationships
Between Buildings,
Streets, and Open
Spaces





More utilitarian features, such as loading docks, can serve off-hour functions, such as lunchtime seating.



Organize internal uses and reconsider building openings in creative ways to connect to exterior spaces.



Locate ground floor uses in mixed-use projects to reflect and support existing uses on a block or street: retail with retail and residential with residential.



Organize Uses to Complement the Public Environment



SIMILAR AMOUNT

TEXTURE SCALE IS SIMILAR BUT USED IN

DIFFERENT WAYS

WINDOWS ARE

DEPTH

SIMILAR IN SIZE, PROPORTION, AND

OF GLASS TO SOLID WALL (SOLID/VOID RATIO)



Geometry relationships and use of similar materials can support compatibility in streetwalls.



Scale and texture similarities can allow differences in color or style.



Projects should both reflect context and be internally consistent.



Harmonize
Building Designs
with Neighboring
Scale and
Materials



Neighborhood commercial uses are often embeded within a residential context and should defer in character and scale.



Timeless, high-quality materials can both express different eras and harmonize a block streetwall.





Fine-grained architectural detail help to enliven the streetwall.



Small-scales of ornament bring a human-scale to facades.



Depth and detail can be invitational.

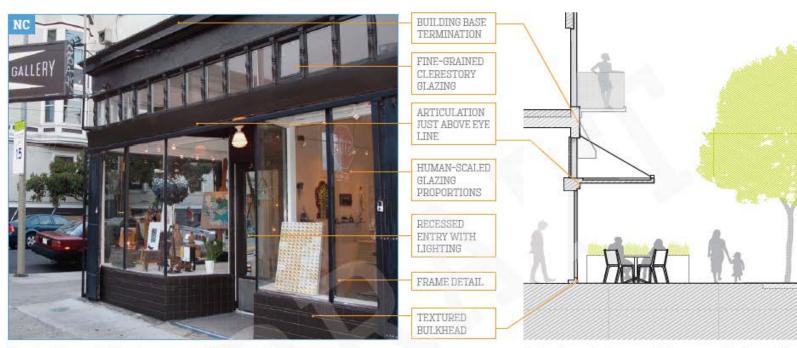


Dimensional variation can create texture in facades.



Render Building Facades with Texture and Depth





Storefront elements bring human-scaled features to the street.



Furnishings and openings can connect interior and exterior uses.

Balconies can help upper stories connect to the public realm.



Building entrances can activate the public realm.



Design Active Building Fronts





Local initiatives create unique places and foster stewardship.



Materials and textures can both support expression and play.



Architectural elements in open space can help express neighborhood identity.



Express Neighborhood Character in Open Space Designs



HISTORIC PRESERVATION IN SAN FRANCISCO











HISTORIC PRESERVATION IN SAN FRANCISCO

What is defined as historic varies from city to city

San Francisco defines every thing over 50 years old as potentially historic

 As development happens, potentially historic resources are evaluated and sometimes can be preserved even w/new development



SUMMARY AND NEXT STEPS

